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Simplify management requirements

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The Department of Defense is in the process of developing implementing regula-
tions and procedures to integrate the "buy commercial" policy into the acquisi-
tion process. To support the implementation of this policy into the process for
acquiring commercially developed systems, research was conducted on Air Force
contractual actions in support of the acquisition of commercially developed
aircraft and contract for the development of...

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The report discusses those contract terms, conditions, and statement of work requirements imposed by the Government in the acquisition and support of commercially developed aircraft not for commercial acquisitions. Research was based primarily on the acquisition and logistics support contracts for the KC-10 Advanced Tanker Cargo Aircraft system. This was followed by analyses of the acquisition and support contracts for the E-4 Advanced Airborne Command Post system and the support contract for the C-9 Aeromedical Evacuation Aircraft system to determine if the impact of the Government-imposed requirements substantiated the findings of the KC-10 research and if not, to identify the differences. To gain further insight into the differences in Government and commercial acquisition practices, an analysis was made of the Air Force acquisition of a major item of ground support equipment for these systems, the Diesel Engine Driven Generator, which was commercially developed and in widespread use by commercial customers.

Higher cost is generated and program stretch-out becomes a possibility when government imposed requirements for additional documentation and reports are demanded indiscriminately. Compliance with special contract terms and conditions increases contractor overhead. Market research and analysis can develop a good business arrangement thereby developing a knowledgeable acquisition strategy for meeting government requirements.

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SIMPLIFYING CONTRACTS FOR COMMERCIAL SYSTEMS

A CASE STUDY OF DOD ACQUISITION OF
COMMERCIAL SYSTEMS AND COMPONENTS

CONTRACT F 33615-78-C-5213

VOLUME II

JANUARY 1980



DON SOWLE ASSOCIATES, INC.
ARLINGTON, VIRGINIA

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VOLUME II

SIMPLIFYING CONTRACTS FOR COMMERCIAL SYSTEMS

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COMMERCIAL SYSTEMS AND COMPONENTS

January 1980

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SIMPLIFYING CONTRACTS FOR COMMERCIAL SYSTEMS

EXECUTIVE SUMMARY

The Office of Federal Procurement Policy issued policy in May 1976 for the acquisition and distribution of commercial products when such products will adequately serve the Government's requirements. The policy applies to all items, principal and secondary, including commercially developed systems. The Department of Defense is in the process of developing implementing regulations and procedures and revising existing policies where needed to integrate the "buy commercial" policy into the acquisition process, using commercial practices where appropriate and feasible. To support the integration of this policy into the process for acquiring commercially developed systems, research was conducted on Air Force contractual actions in acquiring derivatives of commercially developed aircraft and contract logistics support. The results of the research are contained in this report.

The findings reported herein relate to those contract terms, conditions, and statement of work requirements imposed by the Government in the acquisition and support of commercially developed aircraft not found in commercial acquisitions. Research was based primarily on the acquisition and logistics support contracts for the KC-10 Advanced Tanker Cargo Aircraft system. This was followed by analyses of the acquisition and support contracts for the E-4 Advanced Airborne Command Post system and the support contract for the C-9 Aeromedical Evacuation Aircraft system to determine if the impact of the Government-imposed requirements substantiated the findings of the KC-10 research and if not, to identify the differences. To gain further insight into the differences in Government and commercial acquisition practices, an analysis was made of the Air Force acquisition of a major item of ground support equipment for these systems, the Diesel Engine Driven Generator, which was commercially developed and in widespread use by commercial customers. The major findings of the research are summarized below:

1. Approximately 100 General Provisions were included in each of the contracts studied, most of which are meaningless when applied to the purchase of aircraft, spares, or support equipment already produced (off-the-shelf), or are impractical to enforce when applied to commercially developed items in regular production, only a portion of which is purchased by the Government.

2. In the aggregate, General Provisions, particularly those that are required to be included in subcontracts (flowdown), have a significant administrative impact on the contractor, increasing his cost to produce the system over that required to produce for commercial customers.

3. Documentation requirements were approximately one third of the documentation normally required for the new development of a military aircraft system. However, the documentation far exceeded that required in FAA and commercial practices.

4. Extensive documentation of management systems was required by the statement of work. Documentation of management systems was not required by commercial customers for the same basic aircraft.

5. Military Specifications and Standards were applied primarily to modifications to the basic aircraft resulting in two different approaches to the acquisition of a single system, i.e. using commercial standards for the acquisition of the basic airplane and military standards for the modifications.

6. Payment for logistics support based on flying hours simplified spare parts acquisition and accountability but created a problem in cost allowance for contractor capital investment in the parts stocked at operating bases. The solution (Air Force investment in initial provisioning) has the potential for downstream problems associated with property title and accountability.

7. Commercial Diesel Engine Driven Generator sets acquired after market research and comparative testing of commercially developed generators with those produced to military specifications, are superior in performance, require less maintenance, and cost less to acquire and operate than those which are part of the DOD standard family of generators.

8. The follow-on purchase of Diesel Engine Driven Generators is planned to be supported through the Government supply system although commercial distribution of replacement parts is available worldwide where parts can be made available on a quick reaction basis.

The following major recommendations are summarized based on the findings of the research:

1. Develop and obtain approval to use a special set of General Provisions for acquiring commercial systems and products, eliminating those that are not essential or have no practical effect and minimizing the flowdown impact consistent with clause objectives and sound practice.

2. Acquire modified commercial systems in the same manner as commercial systems if the system is available through regular production and the cost of the modifications does not exceed 35 percent of the price of the basic system. If the modifications exceed 35 percent they may be accomplished under a separate contractual arrangement.

3. Rely on FAA standards and established commercial practices and documentation in acquiring commercially developed and proven aircraft to the greatest practicable extent.

4. Where contract logistics support is integrated with support of commercial counterparts, devise a procedure whereby the Government does not take title to spares in view of the problems associated with accountability, traceability and the requirements of the Service Contract Act.

5. Establish requirements and guidelines for the conduct of market research and analysis in order to develop a knowledgeable acquisition strategy for meeting Government requirements (product and support).

6. Rely on commercial distribution and support systems where they are available and adequate to meet Government requirements.

ABBREVIATIONS

The following abbreviations used throughout this case study have the meanings stated:

AARB	Advanced Aerial Refueling Boom
ACSN	Advanced Change/Study Notice
AFAD	Air Force Acquisition Documents
AFB	Air Force Base
AFLC	Air Force Logistics Command
AFR	Air Force Regulation
AFSC	Air Force Systems Command
ARB	Aerial Refueling Boom
ASD	Aeronautical Systems Division (AFSC)
ATCA	Advanced Tanker/Cargo Aircraft
CBEMA	Computer and Business Equipment Manufacturers Association
CDRL	Contract Data Requirements List
CFR	Code of Federal Regulations
COMBS	Contractor Operated and Maintained Base Supply
CSEL	Consolidated Support Equipment List
CWBS	Contract Work Breakdown Structure
DAC	Douglas Aircraft Company
DAR	Defense Acquisition Regulation
DD	Defense Department
DID	Data Item Description
DOD	Department of Defense
DOL	Department of Labor

ECP	Engineering Change Proposal
EO	Executive Order
EPA	Environmental Protection Agency
FAA	Federal Aviation Agency
FLSA	Fair Labor Standards Act
FS	Federal Supply
FY	Fiscal Year
GAO	General Accounting Office
GFY	Government Fiscal Year
GSA	General Services Administration
HPA	Head of a Procuring Activity
HQ	Headquarters
JPO	Joint Program Office
MAC	Military Airlift Command
MDC	McDonnell Douglas Corporation
MIL	Military
MOB	Main Operating Base
NASA	National Aeronautics and Space Agency
ODM	Office of Defense Mobilization
OEP	Office of Emergency Planning
OFPP	Office of Federal Procurement Policy
OSHA	Occupational Safety and Health Act
OT&E	Operational Test and Evaluation
PL	Public Law
RFP	Request for Proposal
SAC	Strategic Air Command

SCA	Service Contract Act
SCN	Specification Change Notice
SERD	Support Equipment Recommendation Data
SOW	Statement of Work
STD	Standard
UPM	Unit Price Matrix
USAF	United States Air Force

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INTRODUCTION

When the Department of Defense acquires commercially available systems and commercial logistics support, the solicitation and resulting contract requirements generally impose administrative burden and other costs in excess of those that are necessary for the contractors to sell the system and logistics support to a commercial customer. Examples of these additional requirements are: documentation and reporting; obtaining prior approval of required plans; processing engineering changes and support equipment requirements; contract administration actions; and the need to analyze large numbers of general provisions to assure understanding of the conditions which must be complied with. All of these requirements can increase the contractor's cost to deliver the system and provide support. Many of the requirements are also required to be imposed on subcontractors by the prime contractor. To better understand the impact of these contract requirements, a case study was made of the contractual elements used by the Air Force in the acquisition and logistics support of several systems derived from commercially developed aircraft. Those systems are the KC-10 Advanced Tanker Cargo Aircraft system, the E-4 Advanced Airborne Command Post system, and the C-9 Aeromedical Evacuation Aircraft system.

Specific tasks were outlined for the conduct of the study. Investigations in accordance with those tasks resulted in detailed data on which the findings, conclusions and recommendations of the study are

based. Analysis of the detailed data obtained, however, revealed several major areas of concern which encompass the results of two or more of the specific tasks. In order to fully address those major areas of concern while providing the detailed data resulting from investigation of the specific tasks, the report of the study is documented in two volumes.

Volume I includes introductory and background information for the study followed by the findings, conclusions and recommendations related to each of the major areas of concern. The major areas of concern are: mandatory general provisions of the contracts; Military requirements of the Statements of Work; corollary findings in Government acquisition of commercial systems; and contract logistics support. Also, a full discussion of the acquisition of a major item of ground support equipment, a commercial diesel engine driven generator, is included as a separate chapter in Volume I.

Volume II includes the detailed data resulting from investigations of the specific tasks of the study with presentation by individual tasks. The data supports the conclusions and recommendations contained in Volume I. Data included in Volume II is based primarily on investigations of the KC-10 acquisition and contract logistics support. The acquisition and logistics support of the E-4 A and B systems and logistics support for the C-9 system were analyzed to determine if the impact of the Government-imposed requirements substantiated the findings of the KC-10 study and, if not, to identify the difference.

TASK 1

Determine what clauses, contractual provisions, regulations, directives, specifications and requirements:

1.1, May or should be waived on a blanket basis within existing laws to facilitate commercial buys for major subsystems.

1.2, Cause added work, increased facilities and administration without producing a direct additional benefit to the Air Force. Special emphasis is to be placed on subtle "ripple effect" actions that a contractor must undertake to comply with Government imposed requirements such as packing and packaging, for example.

1.3, Preclude or inhibit an offeror in a competitive environment from identifying deficiencies, suggesting cost effective technical improvements or alternatives, and more efficient business arrangements out of fear of being considered non-responsive by the Government.

Accomplishment of this task involved the review by at least two researchers of the terms, provisions and requirements of the Air Force contracts with McDonnell Douglas for the KC-10 acquisition and logistics support, and identification of those terms, provisions and requirements (referred to as data elements throughout this report) which merit further analysis. Each page and paragraph of the contracts were reviewed and the data elements initially identified were classified for systematic analysis. The results provide a base of data to be used in subsequent tasks.

In conducting the review, each data element was given a preliminary analysis, and, for those determined by the researchers to meet the criteria of this task, the potential impact was recorded on data forms (Exhibit 1). The selected data elements were then classified according

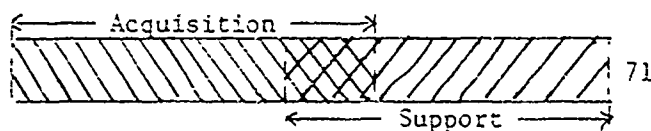
to the specific tasks outlined for the conduct of the study for further analysis (Exhibit 2).

We found that the KC-10 acquisition contract contains 41 Special Provisions (Section J) and the logistics support contract contains 35, of which five are common to both contracts. Thus, 71 different special provisions are contained in the two contracts. Also the acquisition contract contains 99 General Provisions (Section L) and the logistics support contract contains 106, of which 24 differed from those in the acquisition contract. Thus, a total of 123 different general provisions are contained in the two contracts. The special and general provisions of the contracts are summarized as follows:

Contract Provisions

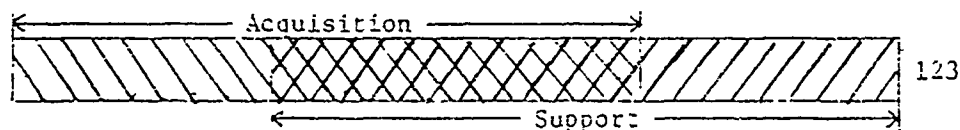
KC-10 Acquisition and Logistics Support Contracts

Special Provisions:



Acquisition Contract	41
Support Contract	35
Same Provisions in Both	5

General Provisions:



Acquisition Contract	99
Support Contract	106
Same Provisions in Both	24

Contract General Provisions That Should Be
Waived to Facilitate Commercial Buys

Commercial products can be categorized in two ways: those which have been manufactured in anticipation of a sale, and those which are being manufactured on a regular production line. In both cases, they represent a product which has been developed and marketed with private capital. In the first case where the products have already been manufactured, the manufacturer cannot comply with those General Provisions of a Government production contract because he was not aware that the product would be sold to the DOD at the time of manufacture. In the second case where the product is purchased from regular production, the product takes its place in the production line and receives the same production handling and processing as the other commercial like-products on the line. It is generally impractical for the manufacturer to establish special handling and issue special purchase orders for parts and materials, with added or changed clauses and conditions for the end item to be delivered to the Government when like parts and materials are being purchased for the commercial end item.

In view of the above, every General Provision was studied as concerns its applicability to the purchase of off-the-shelf products. Judgmental determinations were made to identify those that are candidates for waiver on a blanket basis in order to facilitate commercial buys. As a result of that effort, most of the General Provisions in the contracts for acquisition and logistics support of derivatives of commercial aircraft were found to be of no benefit to the Government.

For that reason a tailored set of clauses applicable to commercial buys has been proposed to be incorporated in the DAR (see Task 6). That set includes the basis clauses which define the rights and obligations of the contracting parties while omitting those found not to be applicable.

Exhibit 3 is a consolidated list of General Provisions contained in both the KC-10 acquisition and logistics support contracts (General Provisions which appear in both contracts have been cited only once). In a separate column identified as commercial off-the-shelf, those clauses required for commercial acquisition are marked with a single asterisk (*) and those to be used when applicable are marked with two asterisks (**). Those clauses not marked are considered to be candidates for waiver on a blanket basis for commercial buys. A separate column identifies those General Provisions that are required by law or Executive Order. In addition, a list of representations and certificates which are cited in the RFP for both the acquisition and logistics support of the KC-10 is included. Those which are considered to be appropriate for commercial buys are marked by an asterisk (*) in a separate column. Those not marked are candidates for waiver on a blanket basis.

It will be noted that a number of General Provisions required by law or Executive Order have been recommended as candidates for waiver on a blanket basis for the procurement of commercial products off-the-shelf. Recognizing that those provisions have the purpose of protecting the economic well-being of the country, they are ineffective in that regard when applied to the acquisition and logistics support of commercially developed systems. In the aggregate, their inclusion in such

contracts increases the Government's and the contractor's cost of overhead as well as contractor direct costs in producing commercial systems without corresponding benefit.

Contractual Requirements That Cause Added Work
Without Producing Direct Additional Benefits

Collectively, the General Provisions identified in Exhibit 3 as candidates for waiver on a blanket basis cause added work without corresponding benefit. The Special Provisions of the acquisition and logistics support contracts for the KC-10, which delineates the obligations, responsibilities and rights of the contracting parties, are specifically tailored to those procurements and, with minor exceptions, were not found to cause added work without added benefit.

The military requirements of the Statement of Work were analyzed to determine what, if any, adverse impact they might have on the contractor's cost to produce the KC-10 and provide logistics support. Military requirements were applied primarily to the acquisition. The Statement of Work contained approximately 117 different requirements, the majority of which closely paralleled commercial practices and created no significant added work over that required to produce for commercial customers. Twenty-three of the 117 different requirements, however, were found to cause added work without direct added benefit to the Air Force and when considered in the aggregate, the added work was of significant proportions. These military requirements are:

- Test and Evaluation Plan
- Production Management Plan
- Facilities Requirements Plan
- System Engineering Management Plan
- Configuration Management Plan
- Human Engineering Program Plan
- System Safety Program Plan
- Electromagnetic Compatibility Plan
- Photographic Plan
- Mass Properties Control and Management Program Plan
- Corrosion Prevention and Control Plan
- Aircraft Structural Integrity Program Plan
- Damage Tolerance and Durability Assessment Plan
- Support Equipment Plan
- Human Factors Test and Evaluation Plan
- Reliability Program Plan
- Maintainability Plan
- Integrated Support Plan
- Technical Order Publication Plan
- Configuration Management Process
- Computer Program
- Support Equipment Process
- Contract Work Breakdown Structure

The military requirements listed above reflect significant differences from commercial practices. A majority of the requirements pertain to the documentation of company management practices and procedures for Air Force review and approval. Although company formats were acceptable, the management plans had to be submitted in accordance with specified Data Item Descriptions (DIDs) which entail a considerable amount of material collection and documentation. Other requirements listed pertain to program control and documentation. For the acquisition of a derivative of a commercially developed aircraft, particularly where a number of aircraft had been produced and a large number of flying hours accumulated, these requirements are considered to be excessive for the benefits gained.

Contractual Provisions That Inhibit An Offeror
from Suggesting Improvements or Alternatives

The Air Force objective in these procurements was to take maximum advantage of previous commercial investment and procedures in acquiring and supporting a currently FAA certified wide-body freighter aircraft and to make minimum changes to provide a tanker capability. In pursuit of this objective the Air Force sought proposals from prospective contractors for modifications to the standard Air Force contract so as to accommodate the offeror's "best business arrangements."

The Executive Summary which transmitted the aircraft Request For Proposals requested the prospective contractors to "take wide latitude in responding to the RFP so as to provide the best possible proposal based on their best business arrangements." The instructions to offerors in the Request For Proposals with respect to the content of Volume XI, Contract Terms and Conditions, to be proposed stated:

"Volume XI - Contract Terms and Conditions

1. The offeror shall review all terms and conditions set forth in the model contract. In order to propose the 'best arrangement,' it is recognized that the various contract terms may be modified to coincide with the 'best arrangement.' Any reasonable suggestion for modification will be considered. The offeror shall support any suggested modification with the following:

a. Detailed rationale explaining the reason for the modification from the offeror's standpoint.

b. Rationale as to why it is in the Government's best interests to concur in the suggested modifications.

c. Suggested legal terminology that would support the above and be suitable for contract incorporation.

2. The offeror shall include, as part of this volume, all representations, certifications and other statements required of him by the RFP. At least two (2) originally signed copies are required. The volumes wherein these originals are contained shall be clearly marked on the cover page of the volume.

3. The offeror shall propose, as part of his best business arrangement, the following provisions:

a. Warranty and/or Correction of Deficiency Clauses.

b. Economic Adjustment Clauses (adjustments for economic price fluctuations).

The provisions proposed should be in their final contractual format. In addition, a narrative explanation in layman's terms shall be included using whatever examples, indices, etc., required to make the content clearly understood."

Further, the Request For Proposal, in Section C, Paragraph 9-II, advised prospective offerors as follows:

"In order to fully exploit the commercial aspects of this program, the offeror should critically review each detail of this RFP with an objective of improving and simplifying wherever possible. This review should not be limited only to the technical portion, but should encompass all business orientations including terms and conditions, cost, etc. Although Air Force requirements in this RFP are stated in military terms, i.e., specifications, standards, data items, etc., the offeror shall propose any existing cost effective commercial data, services and practices that may satisfy the requirements of this RFP. The Air Force will make the final determination of whether or not the proposed commercial data, services and practices meet the intent of RFP requirements. No offeror shall be ruled nonresponsive as a result of proposing these commercial items; however, offerors should provide their rationale/justification for proposing commercial items. Military procedures should not be used when commercial or FAA procedures can accomplish the same objectives in a simpler and less expensive fashion."

Based on the above Request For Proposal Instructions to Offerors, nothing in the RFP or model contract should have been interpreted as precluding or inhibiting any of the KC-10 offerors from identifying deficiencies, suggesting cost effective technical improvements or alternatives,

or proposing more efficient business arrangements out of fear of being considered nonresponsive by the Government.

The Defense Acquisition Regulation (DAR) addresses responsiveness only with respect to bids in formally advertised procurements. DAR 2-301 states "to be responsive, a bid must comply in all material respects with the Invitation For Bids so that, both as to the method and timeliness of submission, and as to the substance of any resulting contract, all bidders may stand on an equal footing and the integrity of the formal advertising system may be maintained. A bid may be considered only if the bidder accepts all the terms and conditions of the Invitation." There is no DAR coverage with respect to a determination of responsiveness in a negotiated procurement.

In addressing responsiveness for negotiated procurements, the Comptroller General stated in one instance,

"An offer which attempted to change a provision of an RFP was properly rejected as non-responsive without further discussions because the negotiated procurement was conducted as though it were an advertised procurement." (Comp. Gen. DEC B-180853, 16 Apr 74.)

In a different circumstance, the Comptroller General ruled that

"... the formal advertising mandate that a bid must be responsive to the competitive requirements is not applicable to a proposal initially determined to be acceptable under negotiated procedures." (Comp. Gen. DEC B-179047, 4 Jun 74.)

DOD Directive 4105.62, Selection of Contractual Sources for Major Defense Systems, provides in part that "Each solicitation shall...ask for comments (from offerors) on performance, schedules, or other contractual requirements which, if changed, would reduce needless costs

or otherwise improve the acquisition program." The directive has been implemented by AFR 70-15 and amplified by AFSC in its Request For Proposal Preparation Guide (AFSC/P 70-4). In the major procurements to which these procedures pertain, offerors are encouraged to make improvement recommendations and the fear of being considered nonresponsive by the Government is not a consideration in making the recommendations.

Lack of coverage in the DAR for responsiveness in a negotiated procurement can inhibit an offeror in a competitive environment from suggesting cost effective improvements to the acquisition program in the absence of specific encouragement by the solicitation. The policy contained in DOD Directive 4105.62 should be expanded to include all negotiated procurements, particularly for the acquisition of commercial products, and incorporated in the DAR. This would enable the Government to take advantage of cost saving suggestions and to fully exploit commercial business practices.

DATA ELEMENT (DE) IDENTIFICATION FORM

Identification Code

1. Data Element Description:

DE No. _____

2. Acquisition Document (DE Source)

3. Effect on Subcontracting:

a. Flow-down contractual provisions Yes _____ No _____

(i) Exceptions under § _____

(ii) Other applicable criteria Yes _____ No _____

b. Limitation on subcontract sources Yes _____ No _____

4. a. Contractor Reports Required Yes _____ No _____

b. Internal (Government) Reports Required Yes _____ No _____

5. Briefly describe the substance of the data element (constraints, inhibitions, added work, interdependent data elements), including (i) any special criteria (other than §) for flow-down requirements to be in subcontracts, (ii) limitations on subcontract sources (exclusionary features), and (iii) the nature and frequency of any required reports. (If space is inadequate, continue on reverse side of form.)

6. Are there any likely direct benefits to the Air Force? Yes _____ No _____

If "yes," explain on reverse side of form or attachment.

Initial Review Completed _____
signature date

* Second Review Completed _____
signature date

*Indicate whether comments have been added..... Yes _____ No _____

Exhibit 1

POLICY/DIRECTIVE SOURCE IDENTIFICATION AND ANALYSIS FORM

Identification Code _____

1. Copy the data element (DE) description as shown under Item 1 of DE Identification Form.
2.
 - a. Identify the statute, Executive Order, Agency regulation, or other controlling authority that primarily mandated or caused ultimate imposition of the DE requirements (root source).
 - b. Identify regulations or issuances that implement a. to the level of ultimate impact.
3. Does the DE contain any requirements that are not either specifically imposed by the root source mandate or essential to comply with its intent? Yes _____ No _____
 If "yes," identify the added requirements, and the implementing regulatory issuance that imposed each or all. (Attach.)
4. With respect to exceptions, waivers, and deviations:
 - a. Does the root source mandate, and/or implementing issuance, provide for, or recognize the need for, relief? Yes _____ No _____
 - b. Does authority exist within the Air Force to grant approvals on:
 - (a) an individual basis? Yes _____ No _____
 - (b) a blanket basis? Yes _____ No _____
 - c. Briefly describe any established criteria and procedure for obtaining approvals, for each regulatory source containing them, and identify the approving authority (attach).
 - d. Identify any variances or omissions in the DE, compared with regulatory requirements, that indicate the necessity for approval of an exception, waiver, or deviation (attach).
 - e. Indicate the potential for obtaining individual or blanket approvals for (i) Government peculiar items, and (ii) for commercial end items or components, showing basis for conclusions reached. (Attach.)
5. Enter the proper identification code in the space provided above.
6. Circle the appropriate tasks below under which this DE should be considered.

1 2 3 4 5 6 7

Prepared by _____ date _____

Approved by _____ date _____

Exhibit 2

The following general provisions/clauses are cited by reference in the KC-10 acquisition fixed price supply contract.

<u>Clause Number</u>	<u>DAR Reference</u>	<u>Clause Title</u>	<u>Commercial Off-the-Shelf</u>	<u>Required by Statute or Executive Order</u>
1	7-103.1	Definitions	*	
2	7-103.2	Changes	**	
3	7-103.3	Extras		
4	7-103.4(a)	Variation in Quantity		
5	7-103.5(a)	Inspection	*	
6	7-103.6	Title and Risk of Loss	**	
7	7-103.7	Payments	*	
8	7-103.8	Assignment of Claims	**	
9	7-103.9	Additional Bond Security		
10	7-103.10(a)	Federal, State and Local Taxes	**	
11	7-103.11	Default	**	
12	7-103.12(a)	Disputes	**	
13	7-103.13(a)	Renegotiation	Expired	0
14	7-103.14	Discounts	*	
15	7-103.16(a)	Contract Work Hours and Safety Standards Act - Overtime Compensation		0
16	7-103.17	Walsh-Healey Public Contracts Act		
17	7-103.1b(a)	Equal Opportunity		0
18	7-103.19	Officials Not to Benefit	*	
19	7-103.20	Covenant Against Contingent	*	0
20	7-103.21(b)	Termination for Convenience of the Government	**	
21	7-103.22	Authorization and Consent		
22	7-103.23	Notice and Assistance Regarding Patent and Copyright Infringement		
23	7-103.24	Responsibility for Inspection	**	
24	7-103.25	Commercial Bills of Lading Covering F.O.B. Origin Shipments	**	
25	7-103.26	Pricing of Adjustments	**	
26	7-103.27	Listing of Employment Openings (See L-9)		

* - Required clause.

** - Optional clause, as applicable

<u>Clause Number</u>	<u>DAR Reference</u>	<u>Clause Title</u>	<u>Commercial Off-the-Shelf</u>	<u>Required by Statute or Executive Order</u>
27	7-104.3	Buy American Act		0
28	7-104.4	Notice to the Government of Labor Disputes		
29	7-104.5	Patent Indemnity		
30	7-104.6	Filing of Patent Applications		
31	7-104.9(a)	Rights in Technical Data and Computer Software	**	
32	7-104.9(h)	Technical Data - Withholding of Payment	**	
33	7-104.9(i)	Identification of Technical Data	**	
34	7-104.9(n)(1)	Data Requirements	**	
35	7-104.9(p)	Restrictive Markings on Technical Data	**	
36	7-104.12	Military Security Requirements		
37	7-104.14(a)	Utilization of Small Business Concerns		0
38	7-104.14(b)	Small Business Subcontracting Program		0
39	7-104.15	Examination of Records by Comptroller General	**	
40	7-104.16	Gratuities		0
41	7-104.17	Convict Labor		0
42	7-104.18	Priorities, Allocations and Allotments		
43	7-104.20(a)	Utilization of Labor Surplus Area Concerns		0
44	7-104.20(b)	Labor Surplus Area Subcontracting Program		0
45	7-104.21(a)	Limitation on Withholding of Payments		
46	7-104.22	Equal Opportunity Pre-Award Clearance of Subcontracts		0
47	7-104.23(a)	Subcontracts		
48	7-104.24(a)	Government Property (Fixed Price)		
49	7-104.28	Quality Program		

* - Required clause.

** - Optional clause, as applicable.

Exhibit 3
(Continued)

Clause Number	DAR Reference	Clause Title	Commercial Off-the- Shelf	Required by Statute or Executive Order
50	7-104.29(a)	Price Reduction for Defective Cost or Pricing Data		0
51	7-104.29(b)	Price Reduction for Defective- Cost or Pricing Data--Price Adjustments-----		
52	7-104.32 (DPC 76-7)	Duty-Free Entry - Canadian Supplies		
53	7-104.33	Inspection System-----		
54	7-104.35(a)	Progress Payments for Other than Small Business Concerns	**	
55	7-104.35(b)	Progress Payments for Small--- Business Concerns-----		
56	7-104.36(a)	Utilization of Minority Busi- ness Enterprises		0
57	7-104.36(b)	Minority Business Enterprises Subcontracting Program		0
58	7-104.37	Required Source for Jewel Bearings		
59	7-104.38	Required Sources for Miniature and Instrument Ball Bearings		
60	7-104.39	Interest	**	
61	7-104.40	Competition in Subcontracting		
62	7-104.41(a)	Audit by Department of Defense		0
63	7-104.42(a)	Subcontractor Cost or Pricing Data		0
64	7-104.42(b)	Subcontractor Cost or Pricing- Data--Price Adjustments---		
65	7-104.45(a)	Limitation of Liability-----	**	
66	7-104.45(b)	Limitation of Liability----- Major Items-----		
67	7-104.48	New Material		
68	7-104.49	Government Surplus		
69	7-104.62	Material Inspection and Receiving Report	**	
70	7-104.69	F.O.B. Point for Delivery of Government-Furnished Property		
71	7-104.70	F.O.B. Origin	*	
72	7-104.72	F.O.B. Origin - Minimum Size of Shipments	**	

* - Required clause.

** - Optional clause, as applicable.

<u>Clause Number</u>	<u>DAR Reference</u>	<u>Clause Title</u>	<u>Commercial Off-the-Shelf</u>	<u>Required by Statute or Executive Order</u>
73	7-104.85	F.O.B. Origin - Government Bills of Lading and Mailing Indicia	**	
74	7-104.73	Loading, Blocking, and Bracing of Freight Car Shipments	**	
75	7-104.74	Shipments to Ports - Clearance and Documentation of Requirements	**	
76	7-104.71	F.O.B. Destination	*	
77	7-104.75	Diversification of Shipment Under F.O.B. Destination Contracts	**	
78	7-104.76	F.O.B. Destination Evidence of Shipment	*	
79	7-104.77(f)	Government Delay of Work		
80	7-104.79(a)	Safety Precautions for Ammunition and Explosives		
81	7-104.81	Accident Reporting and Investigation Involving Aircraft, Missiles and Space Launch Vehicles		
82	7-104.82	Payment of Interest on Contractor's Claims		
83	7-104.83(a)	Cost Accounting Standards		0
84	7-104.93(a)	Preference for Domestic Specialty Metals (Major Programs)		0
85	7-104.93(b)	Preference for Domestic Specialty Metals		
86	7-105.3(c)	Stop Work Order		
87	7-105.4	Report of Shipment (Repship)	**	
88	7-302.23(b)	Patent Rights - Retention by the Contractor (long form)		
89	7-104.83(b)	Administration of Cost		0
90	7-103.28	Affirmative Action for Handicapped		0
91	7-103.29	Clean Air and Water		0
92	7-104.10	Ground and Flight Risk		
93	7-104.44(a)(1)	Value Engineering Incentive (DPC 76-5)		

* - Required clause.

** - Optional clause, as applicable.

Exhibit 3
(Continued)

Clause Number	DAR Reference	Clause Title	Commercial Off-the-Shelf	Required by Statute or Executive Order
94	7-104.64(a)	Recovery of Non-recurring Costs on Foreign Commercial Sales		
95	7-104.26	Special Test Equipment		
96	7-104.61	Frequency Authorization		
97	7-104.51	Production Progress Report		
98	7-104.46	Required Sources for Precision Components for Mechanical Time Devices		
99	7-104.9(m)	Deferred Ordering of Technical Data and Computing Software	**	
100	7-104.9(k)	Rights in Technical Data - Major Systems and Subsystems Contracts	**	
101	7-104.63	Protection of Government Buildings, Equipment and Vegetation		
102	7-104.31(a)	Duty-Free Entry for Certain Specified Items		0
103	7-104.11(a)	Excess Profit		0

The following general provisions/clauses are cited in full text in the acquisition contract.

Clause Number	Clause Title	Commercial Off-the-Shelf	Required by Statute or Executive Order
L-3	Milstamp	**	
L-4	Restrictions on Printing		
L-5	Affirmative Action for Handicapped Workers (May 76)		0
L-6	Safety and Accident Prevention		
L-7	Notification of Government Security Activity (Jun 74)		
L-8	Base Support (Apr 76)		
L-9	Affirmative Action for Disabled Vets and Vets of Viet Nam (Jul 76)		0
L-10	Approval of Contract (7-105.2)	**	
L-11	Ground and Flight Risk		

* - Required clause.

** - Optional clause, as applicable.

Exhibit 3
(Continued)

The following clauses which differed from the clauses in the acquisition contract were cited by reference in the logistic support contract.

Clause Number	DAR Reference	Clause Title	Commercial Off-the Shelf	Required by Statute or Executive Order
65	7-104.45(a)	Limitation of Liability (1974 Apr)	**	
76	7-104.71	F.O.B. Destination (1969 Apr)		
77	7-104.75	Diversion of Shipment under F.O.B. Destination Contracts (1971 Nov)	**	
78	7-104.76	F.O.B. Destination - Evidence of Shipment (1968 Jun)		
92	7-103.15	Rhodesia and Certain Communist Areas (1974 Nov)		
93	7-104.9(o)	Warranty of Technical Data (1974 Nov)		
95	7-104.80	Notice of Radioactive Materials (1974 Apr)	**	
96	7-104.65	Insurance (1968 Feb)		
99	7-104.86	Notification of Changes (undated)		
100	7-104.94	Capture and Detention (1968 Jun)		
101	7-103.10(d)	Taxes, Duties, and Charges for Doing Business (1966 Oct)		
102	7-104.2	Workmen's Compensation Insurance (1960 Jun) (Defense Base Act)		
103	7-104.95	Preference for United States Flag Carriers (1975 Nov)		0
104	7-1902.2	Changes (1971 Nov)	N/A	
105	7-1902.4	Inspection of Services (1971 Nov)	N/A	
106	7-1902.11	Discounts	N/A	
109	7-104.24(3)	Government Property Furnished "As Is" (1965 Apr)		

The following clause which differed from the clauses in the acquisition contract is cited in full text in the logistics support contract.

L-9 Limitation of Government Obligation (AFLC/ASPR Sup 7-750.53)

* - Required clause.

** - Optional clause, as applicable.

Exhibit 3
(Continued)

The following representations and certifications were cited in the Request For Proposals.

	<u>Commercial Off-the-Shelf</u>
1. Small Business	*
2. Regular Dealer-Manufacturer	*
3. Contingent Fee	*
4. Type of Business Organization	*
5. Buy America Certificate	
6. Previous Contracts and Compliance Reports	
7. Affirmative Action Compliance	
8. Equal Employment Compliance	
9. Place of Performance	
10. Certificate of Independent Price Determination	*
11. Certification of Non-segregated Facilities	
12. Requirement for Technical Data Certification	
13. Remittance Address	*
14. Preference for Labor Surplus Area Concerns	*
15. Military Assistance Program Provisions	
16. F.O.B. Point	*
17. F.O.B. Point for Delivery of Government Furnished Property	
18. Place of Inspection	*
19. Restrictions on Disposition of Government Production and Research Property	
20. Qualified End Products	*
21. Qualified Products - Components	*
22. Royalty Information	*
23. Authorized Negotiators	*
24. Certificate of Current Cost or Pricing Data	
25. Certificate of Catalog or Market Prices	*
26. Certificate of Standard Commercial Article	*
27. Disclosure Statement - Cost Accounting Practices and Certification	
28. Cost Accounting Standards - Exemption for Contracts of \$500,000 or Less	
28A. Cost Accounting Standards - Eligibility for Modified Coverage	
29. Additional Cost Accounting Standards Applicable to Existing Contracts	
30. Jewel Bearing and Related Items Certificate	
31. Clean Air and Water Certification	*
32. Minority Business Enterprise	*
33. Women Owned Business	*
34. Percent Foreign Contract	*

* - Representations and certifications which are considered to be appropriate for commercial buys.

TASK 2

Describe and analyze the process and reasons for requests for waivers and deviations to inhibiting (i.e. mandatory) clauses, specifications, and requirements by the ATCA System Program and Purchasing Offices. The analysis is to also address the timeframes from the submission of requests to the receipt of decisions.

The processing of deviations to mandatory clauses is contained in Section 1, paragraph 1-109 of the Defense Acquisition Regulation (DAR) Paragraph 1-102.1 labelled "Applicability," describes what actions and lack of actions constitute a deviation. Paragraphs 1-109.2, 1-109.3 and 1-109.4 identify the approval levels for various deviations, and paragraph 1-109.5 describes the minimum content of any request for deviations (Exhibit 1).

The processing of DAR deviations is governed by DAR 1-109.2 which permits the Military Departments to establish the approval levels for deviations which affect one contract or transaction. The Air Force Supplement to the DAR has delegated the approval authority for one-time deviations to the Head of the Procuring Activity (HPA) with redelegation authority except for those authorizations reserved to the Departmental Secretary or DCD level (Exhibit 2). The DAR Part 2, Definitions, does not contain a definition of either of the terms "waiver" or "deviation." However, reference to "waivers" of various clauses can be found throughout the DAR which make its meaning clear (e.g., DAR 2-202.4(f) Waiver of Requirements for Bid Samples.

The KC-10 JPO developed a full scale Request For Proposals (F-33657-74R-0751) and Model Contract (F33657-77-C-0005) for the aircraft and a full scale Request for Proposals (F33700-76-R-0001) and unnumbered Model Contract for logistics support. The aircraft Model Contract contained 90 General Provisions by reference, eight General Provisions in full text, and 28 Special Provisions in full text. The Request For Proposal Model Contract for logistic support contained 91 General Provisions by reference, five General Provisions in full text, and 32 Special Provisions in full text. Both Requests For Proposals were transmitted to prospective offerors with an Executive Summary. The Executive Summary of the aircraft Request For Proposals dated 3 Aug. 1976 stated in part:

"The Air Force objective is to take maximum advantage of previous commercial investment and procedures...." and later, "The contractors are encouraged to take wide latitude in responding to this RFP so as to provide the best possible proposal based on their best business arrangements."

Paragraph 9 of Section C, Instructions to Offerors of the Aircraft RFP, contains a very explicit statement of the latitudes intended. It reads:

"II. Specific Emphasis

In order to fully exploit the commercial aspects of this program, the offeror should critically review each detail of this RFP with an objective of improving and simplifying wherever possible. This review should not be limited only to the technical portion, but should encompass all business orientations including terms and conditions, cost, etc. Although Air Force requirements in this RFP are stated in military terms, i.e., specifications, standards, data items, etc., the offeror shall propose any existing cost effective commercial data, service and practices that may satisfy the requirements of this RFP. The Air Force will make the final determination of whether or not the proposed commercial data, services and practices meet the intent of RFP requirements. No offeror shall be ruled non responsive as a result of proposing these commercial items; however, offerors should provide their rationale/justification

for proposing commercial items. Military procedures should not be used when commercial or FAA procedures can accomplish the same objectives in a simpler and less expensive fashion."

The Executive Summary letter transmitting the RFP and the Model Contract to prospective offerors and the Request For Proposals Instructions (C-10) for the logistics support contract contains only the following caveat and limited encouragement:

"Evaluation of the offer is contemplated to be conducted primarily on the basis of requirements as set forth in the basic RFP; therefore, failure to fully respond to the basic requirements of the RFP may result in rejection of the offer as non responsive. However, in addition to proposing in the manner set forth herein, the offeror is encouraged to submit an alternate proposal with the objective of improving and simplifying wherever possible. This review should not be limited solely to the technical portion, but should include all business aspects including terms and conditions, costs, and contracting methodology. In order to fully exploit the commercial aspects of this program, the offeror is encouraged to propose any existing commercial data, services, or practices, etc., that may satisfy the requirements of the RFP."

In its response dated 22 November 1966 to the Request For Proposals for the aircraft, the Douglas Aircraft Company requested deletion of four General Provisions (Section L), modification of five General Provisions, the limiting of applicability of 16 General Provisions, and the addition of two General Provisions. These are identified, with the Air Force's disposition thereof, in Exhibit 3. In addition, Douglas Aircraft Company proposed changes to eight Special Provisions in Section J of the Request for Proposal Model Contract and the inclusion of seven additional Special Provisions. The identity and Air Force Disposition of each are described in Exhibit 4.

Six of the Douglas requests were deemed to require processing of a formal deviation approval. In addition, two deviations generated by

the Air Force were determined to need formal approval. The eight issues were processed by the Air Force in three requests. The first covered a change from the normal progress payment procedure based on costs incurred because costs are not accumulated by individual aircraft with the consequent inability to identify applicable costs. The request for deviation from the progress payment clause of DAR 7-104.35(a) was forwarded through AF procurement channels to Headquarters, USAF for consideration by the Department of Defense (DOD) Finance Committee on 21 September 1977. The deviation would permit monthly progress payments starting 22 months before first flight for the first aircraft, and 22 months before delivery of the second and subsequent aircraft. Monthly payments would be at varying rates representing estimates of cumulative cost incurred, to 75 percent of cost one month before first flight/delivery, with an additional 15 percent of price payment upon first flight. The DOD Finance Committee approved the procedure and deviation on 17 October 1977 and so advised the KC-10 JPO in a letter dated 4 November 1977 which was received in the JPO on 7 November 1977.

The second request for deviation contained five issues. The following three issues were generated by Douglas Aircraft Company to relieve conditions created by DAR clauses. Douglas Aircraft Company has standing basic contracts and purchase orders with its established commercial suppliers against which it places orders. The KC-10 acquisition contract contains 37 General Provisions and the logistics support contract contains 34 General Provisions which contain either mandatory or, as appropriate, flow-down requirements of the clause provisions into subcontracts.

The requirement would cause Douglas to amend all of its existing supplier contracts and purchase orders to incorporate the Government clause requirements with respect to the item being furnished for the KC-10 while the Government clause requirement would not be applicable to the same item being furnished for the DC-10 airplane. In addition to the administrative monstrosity created, some Douglas suppliers have refused to accept the Government clause requirements. Douglas therefore sought relief from the requirement to insert the mandatory clauses in subcontracts for DC-10/KC-10 common items. Also, Douglas suppliers who use jewel bearings in components furnished to Douglas for their commercial DC-10 manufacture have established sources of supply and are not willing to change by accepting the Government requirement to purchase jewel bearings from the Government-owned plant for such a small Government requirement. Douglas sought relief from the clause as not being applicable. The Air Force sought a deviation to the requirement as it pertained to KC-10/DC-10 common items. The third Douglas item was for a variation to the DAR 7-103.21 clause, "Termination for Convenience of the Government" and DAR 7-105.3 clause "Stop Work Order" whereby the Government would recognize disruption costs incurred by the contractor as a result of termination or stop work orders which impact the contractor's established production line. The fourth and fifth items, generated by the Air Force, were for a deviation from the five year limitation on the option coverage of DAR-1-1502, "Applicability" of options, because although the options in the contract are available to be exercised in less than five years (1 Dec 78 - 1 Dec 82), the

period of contractor performance may exceed five years (3 Jan 78 - 1 Mar 84). And finally a deviation from DAR 20-305.2(a)(i), "Criteria for Establishing" Contract Exhibits to permit the same contract exhibit to apply to more than one line item. The above five items were included in one consolidated request for a deviation and forwarded to Headquarters, AFLC on 30 September 1977 for action by the HPA. On 20 October 1977 the AFLC-HPA granted a one time deviation on the last four items and referred the request for deviation to waive the mandatory clause clause flow-down to subcontractors to the Director of Procurement Policy, Headquarters, USAF. Headquarters, USAF replied to the request on 16 November 1977. The KC-10 JPO then sent a memorandum to the HQ AFLC-HPA requesting his concurrence in the JPO interpretation of the HQ USAF flow-down decision as being applicable only to those clauses required by statute or Executive Order. The HQ AFLC-HPA concurred with the JPO interpretation on 7 December 1977.

The third request for a deviation from DAR 3-404.3, "Fixed-Price Contract with Economic Price Adjustment" to utilize the McDonnell Douglas standard commercial economic price adjustment clause and to add language to the Special Provision on Warranty and Service Life Policy with respect to latent defects which has the effect of deviating from the latent defect coverage in the DAR 7-103.5(a) clause titled "Inspection." This request was sent to the HQ AFLC-HPA on 25 October 1977 and approved by the AFLC-HPA on 27 October 1977.

A fourth request for deviation containing the same five items as described in the second request above was processed by the contracting

officer for the logistic support contract to the HQ AFLC-HPA on 26 August 1977. HQ AFLC approved the deviation with respect to jewel bearings, options, exhibits and disruption costs on 20 October 1977 but forwarded the flow-down waiver request to HQ USAF where it met the same fate as the same request from the Aircraft Contracting Officer.

The delay by the JPO in processing requests for deviations from RFP submission on 22 November 1976 to forwarding the deviation requests in September 1977 was attributed to delay in completion of the acquisition for a period of approximately seven months due to an Air Force withdrawal of KC-10 funds for that period of time.

ASPR 1-109

1-109 Deviations From This Regulation and Department of Defense Publications Governing Procurement.

1-109.1 Applicability. The ASPR is not intended to stifle the development of new techniques or methods of procurement. Innovations to attain desirable objectives will occasionally necessitate deviations from the ASPR, and it is the responsibility of contracting officers to request such deviations whenever they are required in the best interest of the Government. For the purpose of this paragraph, a deviation shall be considered to be any of the following:

- (i) when a contract clause is set forth in ASPR for use verbatim, use of a contract clause covering the same subject matter which varies from the ASPR coverage, or use of a collateral provision which modifies either the clause or its prescribed application constitutes a deviation; however, in the case of a purchase or contract of an offshore contracting activity with a foreign contractor made outside the United States, its possessions, or Puerto Rico, such contract clauses may (subject to the direction of authority above the level of the contracting officer) be modified if no change in intent principle, or substance is made (Offshore contracting activities shall keep the cognizant unified Commander advised of significant deviations effected under this subparagraph (i));
- (ii) when a contract clause is set forth in ASPR but not for use verbatim, use of a contract clause covering the same subject matter which is inconsistent with the intent, principle and substance of the ASPR clause or related coverage of the subject matter;
- (iii) omission of any mandatory contract clause constitutes a deviation;
- (iv) when a Standard, DD, or other form is prescribed by ASPR or a Department of Defense Directive, use of any other form for the same purpose constitutes a deviation;
- (v) alteration of a Standard, DD, or other form (other than Departmental forms), except as authorized by ASPR or a Department of Defense Directive constitutes a deviation;
- (vi) when limitations are imposed in ASPR or a Department of Defense Directive upon the use of a contract clause, form, procedure, type of contract, or any other procurement action, including but not limited to the making or amendment of a

contract, or actions taken in connection with the solicitation of bids or proposals, award, administration or settlement of contracts, the imposition of lesser or greater limitations constitutes a deviation;

- (vii) when a policy, procedure, method or practice of conducting procurement actions of any kind at any stage of the procurement process is covered by ASPR, any policy, procedure, method or practice which is inconsistent with that set forth constitutes a deviation; or
- (viii) issuance of any instructions described in 1-108(a) (including an instruction for any additional contract clause, form, or type, or additional procurement policy, procedure, method or practice, not covered in ASPR or in Department of Defense Directives) constitutes a deviation unless permitted under 1-108(a)(i)-(vii).

1-109.2 Deviations Affecting One Contract or Transaction.

Deviations from this Regulation or a Department of Defense Directive which affect only one contract or procurement may be made or authorized in accordance with Departmental procedures provided (i) such circumstances justify a deviation and (ii) written notice of such deviation is furnished to each of the following:

Deputy Under Secretary (Acquisition Policy), OUSD(R&E)
Attn: DAR Council - The Pentagon - Washington DC 20301

The Assistant Secretary of the Army (RDA)
Attn: DAR Policy Member - The Pentagon - Washington DC 20310

The Assistant Secretary of the Navy (NRA&L)
Attn: DAR Policy Member - Crystal Plaza, Bldg. 5 - Washington
DC 20360

Director of Procurement Policy, HQ US Air Force
Attn. AF/LGP(DAR) - The Pentagon - Washington DC 20330

Defense Logistics Agency; Executive Director, Contract
Administration
Attn: DLA-AA - Cameron Station - Alexandria, Virginia 22314

National Security Agency; The Director
Fort Meade, Maryland 20755

Defense Communications Agency; The Director
Washington DC 20305

Exhibit 1
(Continued)

Defense Nuclear Agency; Deputy Director, Operations & Administration
Washington DC 20305

Defense Mapping Agency; Director, Logistics Office
Bldg. 56, Naval Observatory - Washington DC 20305

Such written notice shall be given in advance of the effective date of such deviations unless exigency of the situation requires immediate action.

DAC No. 76-17(V), para 79,074.

para. 32.009.15

1-109.3 Deviations Affecting More than One Contract or Contractor.
Except as authorized in 1-109.2, deviations from this Regulation or a Department of Defense Directive will not be effected unless approved in advance by the Assistant Secretary of Defense (Installations and Logistics); provided, however, that unanimous approval by the members of the ASPR Committee will constitute approval of the Assistant Secretary of Defense (Installations and Logistics) of all matters except those involving major policy. Written requests for such approval will be submitted to the Assistant Secretary of Defense (Installations and Logistics) through the ASPR Committee as far in advance as exigencies of the situation will permit, or alternatively, at the option of the Materiel Secretary concerned through use of the Materiel Secretaries' Weekly Conference.

1-109.4 Deviations Required by Government-to-Government Agreements.
Notwithstanding 1-109.2 and 1-109.3, any deviation from this Regulation that is required in order to comply with a treaty or executive agreement to which the United States is a party is authorized unless the deviation would substantially affect a provision of this Regulation that is based on the requirements of a law enacted after execution of the treaty or executive agreement. In the latter event, the deviation shall, in accordance with Departmental procedures, be referred to the ASPR Committee for consideration, and the cognizant unified Commander shall be advised of such action. Any procurement action which constitutes a deviation from an ASPR provision based on such a requirement of law shall be held in abeyance pending consideration by the ASPR Committee. However, if the subject matter of the ASPR provision is not covered in such a treaty or executive agreement and it is decided to treat the subject matter of such an ASPR provision in the contract, the treatment must be in accord with the intent, principle, and substance of the ASPR provision; provided that, if such treatment involves a significant deviation from a clause set forth verbatim in this Regulation, the cognizant unified Commander shall be advised.

Exhibit 1
(Continued)

1-109.5 Requests for Approval of Proposed Deviation. Request for approval of any deviation shall be forwarded to the approving authority through procurement channels. Each submission shall contain as a minimum:

- (i) identification of the ASPR requirement from which deviation is sought;
- (ii) a full description of the deviation and the circumstances in which it will be used;
- (iii) a description of the intended effect of the deviation;
- (iv) a copy of any pertinent document, including forms or clauses and the proposed contractor's request, if any;
- (v) a statement of the period of time for which the deviation is needed; and
- (vi) detailed reasons supporting the request.

Air Force ASPR Supplement

1-109 Deviations From This Regulation and Department of Defense Publications Government Procurement

1-109.2 Deviations Affecting One Contract or Transaction. Unless otherwise specifically excepted in ASPR, Department of Defense directive, or this AF ASPR Sup, one-time deviation authority consistent with 1-109.2, is vested in the HPAs or those specific designees identified in AF ASPR Sup 1-454(d). No one-time deviation will be approved by the HPA where the procurement authorities have been retained by statute or at Departmental or OSD level. The approving authority shall provide the written notification required by 1-109.2 to HQ USAF/LGP (ASPR) which will make the required distribution. The notification shall be furnished in six copies and shall include a complete description of the special circumstances which justify the deviation. The documents requesting the deviation, and approving the deviation must be attached to the notification.2/

1-109.3 Deviations Affecting More Than One Contract or Contractor. Except as authorized in AF ASPR Sup 1-109.2, all requests for deviation from ASPR, Department of Defense Directive, or this AF ASPR Sup shall be submitted through procurement channels to: HQ USAF/LGP (ASPR). Requests will be submitted as a proposed MEMORANDUM TO THE CHAIRMAN, ASPR COMMITTEE, in the same format prescribed in AF ASPR Sup 1-105.50. Requests for deviation which only affect the AF ASPR Sup will be addressed to HQ USAF/LGP (ASPR).2/

1-109.50 Deviations Affecting Appendix E - Contract Financing Regulations. All deviations to the provisions of Appendix must be approved by the DOD Contract Finance Committee.1/

1-454 Designation of Heads of Procuring Activities.

(a) The Commanders of the Commands specified in 1-201.14 are designated

as a "Head of a Procuring Activity" (HPA). Each HPA may authorize an individual not below the level of the staff officer responsible for procurement within the Command headquarters to act for him in exercising ASPR prescribed responsibilities vested only in the HPA.

(b) The Director of Procurement Policy, DCS/S&L, HQ USAF, is the HPA for major commands, and separate operating agencies listed below:

- (1) Air University
- (2) Air Force Communications Service
- (3) Air Force Reserve
- (4) USAF Academy
- (5) USAF Security Services

(c) Commanders of Major Commands and Separate Operating Agencies who are not designated as a HPA but who have a need for one of the ASPR prescribed responsibilities vested in the HPA will submit a request for such responsibility to the Director of Procurement Policy, DCS/S&L, HQ USAF.

(d) The Commanders of the Commands and Agencies set forth in AF ASPR Sup 1-454(b) above are designated the "Designee" as defined in 1-201.23 to the Head of a Procuring Activity and are authorized to perform any act or make determinations contemplated in ASPR or AF ASPR Sups where such authority is vested in the "Head of the Procuring Activity or his Designee" with the power of redelegation not below the level of the staff office responsible for procurement within the headquarters of the Major Command or Special Operating Agencies.

(e) The Air Attachees and Chiefs of Air Force Foreign Missions are designated the "Designee" as defined in 1-201.23 and authorized to perform any act or make determinations contemplated in ASPR or Air Force ASPR Supplements where such authority is vested in the "Head of the Procuring Activity or his Designee."2/

General Provisions (Section L) of the KC-10 Acquisition Model Contract (RFP) to which DAC proposed alternatives; in the DAC Proposal (Volume XI). DAC recommended limitation, modification, deletion or addition of the following General Provisions:

RFP Clause Number	ASPR/DAR Reference	Clause Title	*Action Recommended by Offeror	*Action Taken by AF
2	7-103.2	Changes	B	B
10	7-103.10(a)	Federal, State and Local Taxes	B	E
20	7-103.21(b)	Termination for Convenience of Government	B	B
29	7-104.5	Patent Indemnity	A	A
30	7-104.6	Filing of Patent Applications	A	E
32	7-104.9(h)	Technical Data - Withholding of Payment	B	B
37	7-104.14(a)	Utilization of Small Business Concerns	A	E
38	7-104.14(b)	Small Business Subcontracting Program	A	E
39	7-104.15	Examination of Records by Comptroller General	A	E
43	7-104.20(a)	Utilization of Labor Surplus Area Concerns	A	E
44	7-104.20(b)	Labor Surplus Area Subcontracting Program	A	E
46	7-104.22	Equal Opportunity Pre-Award Clearance of Subcontracts	A	E
47	7-104.23(a)	Subcontracts	A	E
49	7-104.28	Quality Program	D	D
50	7-104.29(a)	Price Reduction for Defective Cost or Pricing Data	A	A
57	7-104.36(b)	Minority Business Enterprises Sub- contracting Program	A	E
58	7-104.37	Required Sources for Jewel Bearings	D	B
62	7-104.41(a)	Audit by Department of Defense	A	E
63	7-104.42(a)	Subcontractor Cost or Pricing Data	A	A
83	7-104.33(a)	Cost Accounting Standards	A	A
84	7-104.93(a)	Preference for Domestic Specialty Metals (Major Programs)	A	E
86	7-105.3(c)	Stop Work Order	B	B
89	7-104.83(b)	Administration of Cost Accounting Standards	A	A
--	7-104.10	Ground and Flight Risk	C	C
--	7-104.31(a)	Duty-Free Entry for Certain Specified Items	C	C
100	7-2003.11(b)	Evaluation of Options	D	D
8	---	Deferred Ordering of Technical Data or Computer Software - Major System Contract	D	D

* A - limitation; B - modification; C - addition; D - deletion; E - none

SPECIAL PROVISIONS (SECTION J) OF ACQUISITION CONTRACT

	<u>Model Contract</u>	<u>DAC Proposal</u>	<u>*Disposition by AF</u>
<u>1. Changes Requested by Offeror</u>			
a. Special Data Provisions	Para 5, pp. 14,15	Para 5, pp. 37-41	B
b. FAA Requirements	Para 12, pp. 18,19	Para 12, pp. 43-45	B
c. Notification of Changes	Para 16, pp. 21-23	Para 16, pp. 46-49	C
d. Warranty of Prices	Para 18, p. 24	Para 18, p. 50	B
e. Associate Contractor	Para 20, p. 25	Para 20, pp. 50-51	B
f. Options	Para 22, pp. 29-31	Para 22, pp. 54-57	B
g. Events Impacting on Price, Schedule or Other Terms	Para 27, pp. 32 A and B	Para 27, p. 59 Para 27, p. 59	C C
h. Option to Acquire Technical Data and Licenses	Para 28, p. 32 B	Para 28, pp. 59-62	A

* A - requested change made; B - modified change made; C - no change from RFP.

SPECIAL PROVISIONS (SECTION J) OF ACQUISITION CONTRACT (CONT.)

	<u>Model Contract</u>	<u>DAC Proposal</u>	<u>*Disposition by AF</u>
<u>2. Additions Requested by Offeror</u>			
a. Special Progress Payments	Not Included	Pages 63-66	**B
b. Special Provisions Relating to Subcontracting	Not Included	Page 67	**B
c. Special Provisions Relative to Standard Commercial Changes	Not Included	Page 67	B
d. Special Provision Relating to Ground and Flight Risks	Not Included	Page 68	B
e. Supplies to be Accorded Duty-Free Entry	Not Included	Page 69	B
f. Warranty and Service Life Policy	Not Included	Pages 71-83	B
g. Economic Price Adjustment	Not Included	Pages 85-104	**B

* A - requested addition made; B - modified addition made; C - addition rejected.

** ASPR deviation acquired.

Exhibit 4
(Continued)

TASK 3

Identify, establish an appropriate methodology, and provide an initial estimate of the cost, schedule, and administrative impact of Air Force and Department of Defense imposed requirements that prohibit or inhibit the economical purchase of commercial systems and subsystems.

The methodology used to determine and provide an initial estimate of cost, schedule and administrative impact of requirements imposed by the KC-10 acquisition and logistics support contracts which meet the task definition are described in this section. Data elements evaluated were those identified in conjunction with other tasks as having an adverse impact on the acquisition and support of the KC-10.

METHODOLOGY

Ideally, a methodology should be so structured that all impact can be measured. To accomplish this, a special data collection program would have to be established at the outset which is designed to specifically accumulate that data. Such a program, however, would add to the cost of the acquisition and, indeed, no such data collection program was established for the KC-10. The methodology described herein reflects a means of gathering and analyzing data in the absence of a special data collection program.

Data Gathering Strategy and Analysis

Data for this study was obtained from both Government and contractor sources. Early in the study period, both sources had to be oriented

toward the objectives of the study and motivated as concerns the importance of the study towards improvements in the acquisition process for future Government acquisitions of commercial products. Motivation is a critical factor since factual supporting data was to be provided without charge to the study contract. In conjunction with a visit to the Air Force KC-10 Joint Program Office, the study team manager and team members visited Douglas Aircraft Company for the purpose of orientation and motivation. Mr. Edward Curtis, Vice President Contracts and Pricing, convened a meeting with the study team and the following Douglas officials, who pledged their complete support:

L. F. Harrington	KC-10 Program Manager
G. D. Staffieri	KC-10 Deputy and Contracts Manager
Dallas Young	Manager, Procurement Analysis
John Carlin	Deputy Chief Counsel
Walter J. Jason	Corporate Patent Director
Donald L. Royer	Assistant Patent Director
G. A. Schalanert	Deputy Director, Engineering
V. A. Panaia	Director, Contract Proposal Integration
C. F. Farr	KC-10 Product Support
L. D. Barbour	Manager, KC-10 Testing

The study team next reviewed the KC-10 project documentation; i.e., Request For Proposals, proposal submissions, contracts, etc. to establish a data baseline for the study. Each contract term and provision and Statement of Work requirement was reviewed and given a preliminary analysis for its potential impact on the economical purchase of the KC-10

and its logistics support. Those items identified by the researchers as having potential impact were documented as "data elements" for further investigation. When all the data elements had been identified and categorized, they were submitted to Douglas officials for verification of the preliminary analysis and to obtain additional data which would be useful in making an initial estimate of cost, schedule, or administrative impact.

The written submission of the data elements identified by preliminary analysis was forwarded a few weeks in advance of another study team visit to the contractor's plant to permit further investigation and discussion. During the follow-up visit, the study team met with the following Douglas Aircraft Company personnel to determine which data elements identified had a material impact and to acquire impact data for further analysis:

G. D. Staffieri	KC-10 Deputy and Contract Manager
C. W. Andrews	Director, KC-10 Program Engineering
D. F. Young	Manager, Procurement Analysis
R. B. Martin	Manager, Configuration and Data Management
E. G. Fulks	Manager, Quality Assurance Program Management

Every valid method for quantifying impacts was pursued. Quantifiable cost, schedule and administrative impact data, however, was not available for many individual data elements although estimates by qualified individuals were obtained. A breakout of data for each data element would have required considerable effort on the part of contractor

personnel and, while the Douglas officials remained completely cooperative, they had no way of accounting for the cost of additional effort.

Following the Douglas plant visit, the study team visited the Air Force KC-10 Joint Program Office to obtain additional data on the management of the KC-10 program, including the acquisition strategy for the KC-10 and rationale for contract requirements. With all of the refined data acquired from both visits plus supplemental data, further analysis was made. As a part of the final analysis, regulatory directives and the military specifications and standards cited in the contracts were reviewed for intent as related to the acquisition of commercial products. A draft report was then prepared. This draft was hand-carried to Douglas by a member of the study team for a point-by-point review with contractor personnel in still another attempt to obtain quantifiable supporting data.

Determining Impact

In view of the differences in cost accounting systems between different contractors, in data elements identified for various systems, and in military requirements imposed on different acquisition programs, the methodology used in estimating the cost, schedule and administrative impact for the KC-10 study may not be directly applicable for use on replicated studies of other system acquisitions. For that reason, it is necessary to establish a methodological approach to determining impact. The following guidelines are set forth to support such an approach:

1. Specify the time period of the costs collected for the study for historical perspective, consistence and comparability within time periods.

2. Identify a specific requirement (data element) for determination of the impact of that requirement.

3. Collect cost data to support the cost of compliance with the specific requirement. All data elements will not be subject to cost verification since company financial records seldom directly identify the costs related to compliance with a specific requirement. Such costs may be included in broader accounting classifications associated with a number of contract provisions but can be segregated by allocation, averaging or other estimating techniques.

4. Where estimating techniques are used, establish that the method used is reasonable, appropriate and conceptually sound.

5. In lieu of accounting data, use documented cost estimates by qualified personnel.

6. Identify source of cost data whether it be accounting or other financial records, or alternate sources such as vendor price lists, engineering or production records, bills of material, or documented estimates by qualified personnel.

7. Determine incremental costs by identifying the cost of actions taken to comply with a requirement which would not have been taken in the absence of the requirement.

8. Discard immaterial compliance costs unless a logical grouping results in a significant aggregation of cost.

9. Include only costs attributable to compliance with the imposed requirement. The test for determining attributable costs is whether the resources identified would be re-directed to other productive uses if the compliance action were not required.

10. Where the impact of a data element cannot be cost quantified, ascertain schedule or administrative impact where possible. Schedule delays or workload factors are units of measure which may be used to express differential impact.

11. Apply the principles used in cost collecting to achieve desired reliability or accuracy of schedule or administrative impact; i.e., identify sources, describe methods used to allocate, estimate or average workloads and establish that such methods are reasonable, use documented estimates by qualified personnel, etc.

12. Where schedule or administrative impact cannot be described by specific time delays or workload factors, depict the impact in gross terms, such as "substantial effort," depending on the information available.

Other Studies

In developing the methodology to estimate the cost, schedule and administrative impact of imposed requirements that prohibit or inhibit the economical purchase of commercial systems and subsystems, two other studies were found which involved similar tasks:

1. Cost of Government Regulation Study for the Business Round-
table, March 1979, by Arthur Andersen & Co. This study was directed

to costs incurred in 1977 by 48 companies in complying with the regulations of six Federal agencies.

In this study, the comprehensive and systematic methodology required volunteer participating companies to meet a high standard of documentation and internal review before reporting results to Arthur Andersen & Co. Additionally, the Andersen Company trained the companies' project leaders and participated in the companies' training meetings, provided field support, and reviewed the results for proper interpretation, documentation and reasonableness in relation to other industries of the same type. The conditions under which that study was conducted were tailored to the measurement of costs to the company and required extensive, out of the ordinary effort by the participants to apply the unique methodology. Such a requirement could not be levied on the DAC in this study.

2. Comptroller General of the United States, July 1975. Elmer B. Staats, the Comptroller General, wrote to seven companies which sold the same or similar items to commercial customers and to the Government. He asked them to identify the aspects of doing business with the Government that added unnecessary costs and whether these additional costs were avoidable. Replies from six companies were summarized by the General Accounting Office (GAO), but without a set format. Some of the results of that survey were expressed as percentages added to the cost of a commercial system. For example, the added difficulties and complexities in reaching mutually acceptable contractual documents (government specifications, terms and conditions, volume, detail, etc.)

were estimated by the participating companies to add 4 to 5% to the cost of a contract for a system in excess of \$100,000.

The GAO study is a valuable adjunct in comparing the replies of those six companies (one was McDonnell Douglas Corporation) to our findings in comparable areas. Our cost methodology encourages generalized cost percentages. However, workloads which stem from groups of actions (e.g., flow-down of clauses) and affect a number of other actions (e.g., numerous purchase orders and subcontracts) may be expressed as added percentage of work across one function in a department but not as a percentage of program dollars. A summary of the GAO cost study is attached (Exhibit 1).

INITIAL ESTIMATE OF IMPACT

The methodology described above was used in making an initial estimate of cost, schedule and administrative impact of Government imposed requirements on the KC-10 acquisition and logistics support program. Cost impacts have been quantified where possible. However, as mentioned earlier, cost data on all of the individual requirements, particularly those which had an impact on other requirements, did not fit the structure of the Douglas accounting system. Douglas maintains two separate accounting systems for the KC-10; the established system for the DC-10 and a separate cost charge number for the KC-10 peculiar items. The requirements imposed in the Government contracts impinge on both accounting systems but the systems do not necessarily provide for isolation of cost data in accordance with the individual data elements.

Purchasing and Material Management

The contractor's Material Division has experienced significant impact caused by the flow-down provisions of KC-10 contract clauses. This impact can best be described by an overview of the DC-10 purchasing and subcontract program and the phase-in of the KC-10 common and peculiar requirements.

The Material Division had an established base of subcontractors for the DC-10 commercial aircraft program. All of these subcontractors were asked to accept flow-down provisions from the KC-10 prime contracts. Some of the prime contract clauses are applicable to all KC-10 subcontracts while some apply only to KC-10 peculiar subcontracts because DAC was excused from the obligation to flow-down General Provisions not "established by U.S. Law or Executive Order or regulations implementing U.S. Law or Executive Order" in subcontracts for "common" items. Since most of the General Provisions required to be flowed down are, in fact, based on U.S. Law or Executive Order or implementing regulations, this waiver extends to only a relatively few DAR clauses.

Long term requirements type Basic Agreements had been entered into with about 20 suppliers of major items, e.g., landing gear, fuselage, engines, pods, and major avionic and electronic systems. Approximately 170 similar purchasing agreements had been entered into with suppliers of high-dollar value equipment items. These agreements were level priced over estimated program requirements, e.g., 300/400 shipsets. Nonrecurring costs were amortized over the estimated requirements or other agreed quantities. These agreements contained a provision that in the event

of sales of aircraft to the United States an amendment of the agreement would be made to include applicable provisions required to meet MDC's obligations under the Government prime contracts. If the provisions modified the work to be performed, an equitable adjustment in price would be negotiated by the parties. Despite this provision, amendments to all these agreements had to be negotiated. This task was compounded by the fact that separate provisions had to be agreed to for peculiar as well as common items.

The flow-down provisions were generally acceptable to subcontractors who have other Government contracts (although exceptions were commonly taken and efforts had to be expended to negotiate acceptance), but great resistance was experienced with suppliers who did not have other Government contracts. A few have absolutely refused to accept any Government provisions.

The original KC-10 system contract authorized preproduction engineering. The first aircraft were ordered by the exercise of Option #1 on November 1978. Lead times for delivery of these aircraft were such that orders for the procurement of hundreds of hardware items had to be issued prior to exercise of the option. This situation created much confusion with regard to the identification of common items. Extensive educational efforts were necessary to apprise personnel who buy parts for the DC-10 of the Government imposed requirements for buying parts for the KC-10.

As early as January 1978, the Material Division began revising all of its established, long-standing terms and conditions to provide for the KC-10 common and peculiar flow-down. The established standard terms

and conditions had to be retained for DC-10 requirements. In spite of aggressive staff action, by October 1978 the Vice President, Material found it necessary to appoint an Ad Hoc Task Force to "develop requisite guidelines, formats and procedures." Correspondence relating to preparation and coordination of modifications to terms and conditions and problems relating to identification of peculiar vs. common was already one inch thick. Correspondence with individual subcontractors who had taken partial or complete exception to KC-10 terms and conditions was another inch thick. Two inches of paper at the staff level generates conservatively ten times that much paper at the operating level. A number of the 20 suppliers with basic agreements for major items and 170 suppliers with purchasing agreements for high dollar value equipment items took some exception to the proposed amendments as a result of the confusion created by different terms and conditions for "DC-10 Common," "Kc-10 Common" and "KC-10 peculiar." For example, a member of the study team visited one supplier who manufactures aircraft seats. The supplier refused to take an order with other than standard DC-10 commercial terms and conditions. He was to build the seat for the boom operator. He had been selling seats to airlines for years and did not see why this order could not be at his terms.

Buyer Special Training

In the fall of 1978, it became apparent to Douglas Management that a multitude of problems was developing with respect to reaching contractual coverage with its suppliers of hardware for the KC-10 aircraft.

These problems were generated by initial lack of familiarity by the Douglas commercial procurement staff with contract requirements for the KC-10. To resolve this, a series of buyer training programs were established. From October through December 1978 special buyer training was conducted in eight training sessions attended by an average of 20 buyers per session to teach the peculiarities of buying for the KC-10. Each session lasted one and three quarter hours. At an average annual buyer salary of \$32,000, the student cost was approximately \$4,500. Forty-eight instructor hours at an average annual salary of \$42,000 contributed another \$1,000 for an approximate cost of \$5,500 for the training.

Another series of training sessions started in July 1979, six months after the completion of the first sessions. These training sessions consisted of 15 two-hour sessions for 120 buying personnel. This 3600 hours of buyer time at the \$32,000 rate was approximately \$60,000, plus 120 instructor hours at the \$42,000 rate added another \$2,600 for a total cost of \$62,600. The two training sessions cost approximately \$68,100 and related primarily to the KC-10 program in the opinion of the procurement manager most familiar with both the problems and the solutions.

In addition to these special training costs, the procurement analysis manager estimated that for the past year and a half his office has expended the efforts of one person full time on KC-10 problems in the Material Division, which at the \$32,000 annual rate would amount to another \$48,000. This amount added to the training cost would total

over \$116,000 attributed to the "noncommercial" aspects injected by the peculiarities of the KC-10.

To recapitulate, the \$116,000 includes the cost of resolving the problems related to terms and conditions at only one level, the prime contractor level. The greater cost at the buyer/supplier level has not been quantified except for the buyer special training.

Management Plans

The Statement of Work for the KC-10 acquisition contract required the contractor to prepare and submit to the Air Force for approval a number of Management Plans. The management plans, for the most part, consisted of documentation of company procedures and practices for the management of development, test and production and were prepared using company format. The plans address the criteria of various military standards and specifications and include the information specifically called out in the Data Item Descriptions as amended by the CDRL.

Although the Air Force agreed to accept the contractor's format for management plans, preparation of each plan required integration of information from a number of company source documents. Even though information was available in some form, the integration of data into a specific management plan is a time consuming task. Data from such contractor functional groupings as engineering, scheduling, pricing, etc., has to be reorganized and tailored to meet the requirements of DIDs. The review, discussion and rework of the plans to gain Air Force approval consumed a significant amount of additional manhours.

Of the 19 required management plans, the Human Factors Test and Evaluation Plan was combined with the Test and Evaluation Plan. The Reliability and Maintainability Plans were also combined, thus there were 17 management plans prepared, of which the preparation of 15 were assigned to the KC-Program Engineering Group.

Estimates of the manhours required to prepare management plans were applied to these 15 plans. The 15 plans consisted of over 700 pages and the preparation and initial rework required over 7,000 manhours of effort from that group.

Further, the effort required of company management personnel as well as the illustration and publication personnel, in addition to the effort of the engineering group, increased the total effort to prepare the 15 plans to approximately 10,000 manhours. No estimates have been made of the manhours of key personnel time consumed in reviewing and discussing these plans with Air Force personnel although the manhours expended are considered to be significant.

The two other management plans required were separately assigned to Douglas staff components. An Integrated Support Plan (ISP) was required for the preoperational phase of the program and a Technical Order Publication Plan for the preparation, review, validation, verification, control and maintenance of Technical Order Publications was required. No estimate of the manhours expended in the preparation and approval of these plans was obtained.

MANAGEMENT PLAN PREPARATION
Manhour Requirement - KC-10 Program Engineering Group

<u>Plan</u>	<u>Pages (Actual)</u>	<u>Page (est.)</u>	<u>Initial Prepar- ation</u>	<u>Rework (Est.)</u>	<u>Total Man- Hours</u>
Test & Evaluation	88	10	880	400	1,280
Production	63	5	315	100	415
Facilities Requirement	72	5	360	100	460
System Engineering					
Management	26	7	132	100	232
Configuration Management	42	10	420	130	550
Human Engineering Program	33	7	231	100	331
System Safety Program	52	7	364	160	524
Electromagnetic Compat- ibility	74	8	592	160	752
Reliability and Main- tainability	61	7	427	160	587
Photographic	6	8	48	8	56
Mass Properties Control	14	10	140	40	180
Corrosion Prevention and Control	10	8	80	16	96
Aircraft Structural Integrity Program	91	10	910	200	1,110
Damage Tolerance and Durability Assessment	33	10	330	120	450
Support Equipment	<u>36</u>		<u>252</u>	<u>100</u>	<u>352</u>
	701		5,531	1,944	7,475

Add 33-1/3 percent for management and publications manhours required, resulting in a total of approximately 10,000 manhours for preparation of 15 management plans.

Other management plans required, but not included here because data was not collected, are the Integrated Support Plan and the Technical Order Publication Plan.

Source: KC-10 Program Engineering Group, Douglas Aircraft Company

Configuration Management

The KC-10 acquisition contract requires that all ECPs which would affect KC-10 peculiar specification requirements, price, delivery schedule, specified weight or performance, specified interchangeability requirements, the KC-10 maintenance and logistics support concept, or require re-identification of a provisioned spare part or spare assembly be processed as Class I ECPs. Routine ECPs (other than Emergency, Urgent, or Compatibility ECPs) proposed by the contractor require an ACSN be submitted and approved by the Air Force before an effort can be started on the study for preparation of the ECP. Routine Class I ECPs proposed by the Air Force do not require an ACSN.

The ACSN includes an identification of the item affected, an explanation of the need for the change, a technical description of the modification or study needed in sufficient detail for understanding of the problem to be corrected, a listing of alternative ways to meet the need for change noting the desirability and cost estimates for each, and a cost estimate for development and production of the proposed change. An approved ACSN is the document which allows the contractor to submit a Class I ECP. The Class I ECP provides detailed engineering data and drawings for the evaluation of the proposed change and, for the KC-10 program, a not-to-exceed price and other information for contractual purposes. If the proposed change is technically approved, a firm fixed price is negotiated before final approval is given by the Air Force.

Standard commercial changes (those that do not fall within the Class I ECP criteria) can be made to the basic airplane without Air Force

approval provided a Specification Change Notice (SCN) is submitted to the Air Force concurrent with its release from engineering for concurrence in classification. The Air Force reserves the right to delete any Class II changes not desired by the Air Force and the contractor may pursue the engineering change as a Class I ECP.

In commercial practices where the producer proposes to make a Class I type engineering change (major changes that affect price, performance, schedule or maintenance) after the aircraft design has been set, customers are notified of the potential value of the change with estimated costs and a statement of interest is solicited. If most of the customers desire the change the contractor incorporates it in the airplane. Standard commercial changes (Class II changes) are made by the producer and customers may or may not be notified, depending on the nature of the change.

The preparation and processing of ACSNs imposed more work on the contractor than the processing of changes with commercial customers. The amount of work involved is dependent upon the nature of the change. In addition, a considerable amount of effort was expended in deriving a firm fixed price for the change before the change has been made. Particularly troublesome for DAC was the establishment of a firm fixed price for a change which will be incorporated in aircraft to be purchased in the out-years in view of the unique unit pricing procedures for the out-year buy of the KC-10.

Computer Programs

The Statement of Work for the KC-10 acquisition contract required that each new computer program be managed as an individual configuration item in accordance with MIL-STD-483. For each new computer program, a development specification, a product specification, and a version description document was required to be submitted in accordance with the Data Item Descriptions contained in the CDPL.

For the conversion of the DC-10-30F to the KC-10 configuration, only one new computer program was needed. That program was required for the control of the Aerial Refueling Boom (ARB). After the computer program is developed and the required control of the boom demonstrated, the computer will be hardwired for operational use. This type of computer program, referred to as "firmware," is used where no changes to the operational capability, once developed, are envisioned.

MIL-STD-483 applies to the development and production of computer programs (software), primarily for configuration control where future operational changes are anticipated. The documentation required is necessary for the maintenance of the software. It is questionable, however, whether all of the documentation required under MIL-STD-483 is needed when the computer program is to be hardwired into the computer for operational use of the equipment and no computer program changes can be made without a redesign of the computer.

In commercial practice, the contractor prepares a Computer Software Quality Program Plan in accordance with FAA-STD-018 which outlines the

process flow, validation of technical requirements, testing, evaluation criteria, design reviews, etc. Where a computer program is developed which is to be hardwired into the computer, sufficient documentation is prepared to authenticate the program.

It is estimated by Douglas that to develop the computer program for controlling the refueling boom on the KC-10 in accordance with commercial practices, between 1600 and 1300 manhours of effort would be required. It is also estimated by Douglas that the preparation of the documentation required by the Air Force for the KC-10 will result in an expenditure of an additional, equal amount of effort.

Support Equipment

Proposers were required to submit a Consolidated Support Equipment List (CSEL) with Support Equipment Recommendation Data (SERD) for each item of KC-10 peculiar support equipment as a part of their proposal. The subsequent KC-10 contract statement of work required the contractor to initiate non-recurring design and engineering effort for those items listed after each SERD had been approved by the Air Force. As additional requirements for peculiar support equipment are identified, the contractor must submit a SERD for each item to the Air Force and obtain approval before detailed engineering design of the item can be started.

The SERD requires documentation of a functional analysis, adequate engineering data for a complete technical description, level of maintenance (organizational, intermediate, or depot level), cost of ownership, useful life, etc. and for the KC-10, a firm fixed price for

development and production of the item. The most troublesome problem for the contractor is to establish a firm fixed price for a support equipment item before the detailed engineering design has been started, particularly where subcontractors are involved.

In commercial practices, the contractor may design and/or recommend support equipment for the customer but rarely does the contractor build or buy support equipment. Commercial customers have their own logistic support systems and are responsible for the acquisition of their own support equipment.

Contract Work Breakdown Structure

The KC-10 is being produced on a common DC-10 production line with KC-10 modifications being made on-line. It is estimated that the KC-10 will be approximately 38 percent common with the DC-10-30F. DC-10 aircraft are currently being produced at a rate of 41 aircraft per year of which two will be KC-10s. The acquisition contract requires a Contract Work Breakdown Structure (CWBS) for reporting schedule performance for the KC-10. A CWBS is a product-oriented family tree division of tasks which organizes, defines, and graphically displays the product to be produced, as well as the work to be accomplished to achieve the specified product. From the CWBS, the contractor must establish a Program Master Schedule, an Engineering Master Milestone Schedule, and First Article Production Schedule for the KC-10. In view of the production strategy where the KC-10s are intermixed with the production of DC-10s, the difficulty arises in establishing a CWBS applied only to the KC-10

aircraft which would be meaningful in reporting schedule performance. Although the manhours expended in preparing a CWBS for the KC-10 were not specifically recorded, it was reported that an extraordinary amount of key personnel time was spent in developing CWBS data as required by the CDRL. The CWBS which was submitted by the contractor is not being used by the Air Force for assessing KC-10 schedule performance in deference to other scheduling information. The need for a CWBS for an item that has already been in production for an extended period is not apparent.

Indirect Cost Impact

Much of the added costs generated by the requirements of a Government contract are incurred by a contractor's salaried staff personnel which are charged to overhead accounts. Generally, there are no work orders or special accounts created against which overhead costs incurred in responding to a Government contract requirement are charged. It is proper to accumulate overhead costs by major groupings, such as manufacturing overhead, engineering overhead, etc., and pro-rate them. As a result, the impact of Government contract requirements on overhead can at best be only estimated. The proration of the costs may bear no correlation to the amount of effort expended to respond to the Government. As a case in point, Douglas estimates that Government business is approximately 15 percent of the total Douglas business at Long Beach, but the Douglas Manager of Quality Assurance Program Management estimates that responding to Government requirements occupies 50 percent of his

time. It is reasonable to assume that costs generated by Government requirements charged to overhead accounts are included in the price the Government pays for its products.

ANALYSIS OF PROJECT RED TAPE

A Study Conducted By The GAO

Submitted

by

STERLING INSTITUTE (OAC)

Under Subcontract With

Don Sowle Associates, Inc.

September 17, 1979

Exhibit 1

Project Red Tape

Background

In July 1975, the Comptroller General sent letters to the Chairman or the Board or chief executive officers of seven large companies. The objective of this communication is set forth in the following excerpts from the Comptroller General's letter:

"From time-to-time, we have read and heard statements to the effect that there is a lot of unnecessary 'red tape' or paper work involved in contracting with the Federal Government. We have also seen statements to the effect that a commercial contract can be performed for perhaps 15 to 20% less than a similar contract can be performed for the Government. Among the points raised are delays in getting decisions, unnecessary reports, excessive contract administration and audit, and so on....

We would, therefore, be most grateful if your company could identify for us those aspects of doing business with the Government which, in your view, entail the greatest expense. We would also like your views as to whether these additional costs are avoidable and, if so, why....

Ideally, we would like to see a cost comparison for one or more items that you sell to both the Government and to commercial customers. We would like to see any additional costs involved with the items sold to the Government broken down by major reasons, for example, additional product testing, compliance with contracts that require labor laws, time spent with auditors, etcetera. If a cost comparison is not possible, we would appreciate your estimate of additional cost caused by specific peculiarities of Government contracting, together with some information on the basis for your estimate."

The seven companies solicited were: Aerojet Manufacturing Company, Boeing, Caterpillar Tractor, Honeywell, Hughes Aircraft, LTV Corporation, McDonnell Douglas. Replies were received from six of the seven companies. Aerojet Manufacturing declined on the basis that it did not have direct experience in selling similar items to both the Government and commercial customers.

For the purposes of analysis, concerns of the Council of Defense and Space Industries Association (CODSIA) were included. CODSIA comments were utilized because they had provided a study of costs unique to Government contracting and many of the items mentioned in the CODSIA study were similar to those identified by the six contractors.

Exhibit 1
(Continued)

Highlights of Replies

Following is a summary of the "red tape" areas of most concern to industry:

<u>Areas</u>	<u>Contractors Mentioning Areas</u>
Use of Government specifications and standards when commercial specifications and standards would suffice.	Hughes CODSIA Caterpillar Honeywell McDonnell
Government specifications sometimes hard to follow, contradictory, behind the state of the art, too rigid, too specific or inappropriately applied.	CODSIA Boeing Honeywell McDonnell
Excessive testing and quality control required.	CODSIA Hughes Honeywell
Unnecessary management control systems imposed and contract data required.	CODSIA Boeing Hughes Honeywell McDonnell
Excessive audits and surveys.	Honeywell CODSIA Boeing Caterpillar McDonnell
Delays in Government decision making; e.g., delays between bid submissions and contract award, delays in approval actions (design, subcontractors, changes, etc.).	CODSIA Honeywell LTV
Layering of program management responsibility.	Boeing Hughes CODSIA
Obstacles to timely approval of contract changes.	CODSIA Boeing Hughes

Exhibit 1
(Continued)

<u>Areas</u>	<u>Contractors Mentioning Areas</u>
Problems with Cost Accounting Standards (should not pertain to commercially oriented companies or company segments; DOD implementation is inconsistent; standards overly detailed, etc.).	Boeing Honeywell Caterpillar McDonnell
Excessive recordkeeping for Government facilities at contractor's plant.	Boeing CODSIA
Response to requests for proposals entails a great amount of paperwork.	Boeing Honeywell CODSIA McDonnell
Delays in obtaining contract funding.	Boeing Caterpillar

GAO Study Approach

The initial study phase of industry responses by GAO involved three contractors: McDonnell, LTV and Honeywell.

McDonnell and LTV were picked as major defense contractors producing items unique to the Government. Honeywell was picked as a supplier of commercial-type items modified to meet Government requirements.

GAO concentration in the McDonnell study was to cover contractually required reports on administrative, financial and technical performance and status; Government specifications and standards; and data entailed in proposal submissions.

The GAO study approach was to select specific items of red tape relative to specific contracts or RFPs, try to evaluate the need for the item and estimate their cost. GAO then contemplated that it would go to the pertinent Government buying office to find out why each selected data item was necessary and evaluate the requirements leading to specifying each data item.

MDC Issues

The key McDonnell Douglas point in elaborating categories of problems in the application and content of Government procurement documents was "misapplication." The issue was application too early in a program, the leading example of which was the use of "production" requirements for full-scale development. Other aspects of "misapplication" included applications without "tailoring"; utilization of

procurement documents as contractual requirements, versus guides; blanket application of Government procurement documents to all items instead of only those accepted by the Government. A major IDC point was that application of Government procurement documents was done without any knowledge of a cost/benefit analysis and without any recognition of the differences in programs, customers and contractors with whom the Government was involved.

Another important consideration in the McDonnell Douglas response was problems "independent of application." These included "conflict" in executive branch policy, for example, Air Force service policy prevailing over OSD; duplicate or redundant applications; excessively detailed "how to" approaches in application; attempts to solve problems not defined which might not exist and frequently, if they did exist, were not likely to occur again. Required documentation was disproportionate to needed program visibility; there were unwarranted traceability requirements; adherence to a rigid scenario for development of "the unknown"; establishing milestones for continuous processes; and establishing invalid contract requirements, as for example on the prime's subcontracts.

Methodologies for Estimating Cost Impacts

The proposed Comptroller General study covered Government unique as well as commercial counterpart products. The principal interest in the GAO study was to be able to compare and contrast the difference between selling costs to the Government, complying with Government specification requirements, and selling a similar item in the commercial sector. No single response of the six received by the Comptroller General contained a self-executing "methodological approach" to conceptualizing the cost differences between sales of a commercial item into the private sector and to the Government, but collectively the various efforts to quantify these costs gave some insight into those differences.

Indirect Costs

Most of the respondents to the Comptroller General's letter calculated direct recurring costs attributed to specific contractual requirements. Excluded were many indirect or non-recurring costs such as research time and keeping abreast of developments, time in auditing compliance, consultation time with Government representatives, paper and reproduction costs, legal fees, and filing and record maintenance costs. Thus, there was an attempt to isolate costs incurred solely due to Government requirements in a specific contract, over and above those necessary for basic participation in the Government marketplace. It would be most difficult for any methodological approach to try to capture many so-called indirect or non-recurring costs. Hence, the

principal objective in any methodological approach would be to cover the direct, non-recurring costs attributable to specific contracts.

Base Cost Measure

One interesting approach proposed in replies to the Comptroller General request for comments was an effort to calculate cost differences between selling an item in the private sector and selling the same item to the Government. Percentages were utilized to express differences for selling to the Government, measuring from a "normal commercial job" base equivalent to 100%. (Honeywell.)

Variations from this base for sales to the Government included the following:

1. Added difficulties and complexities in reaching mutually acceptable contract document.
 - a. Jobs whose price was less than \$100,000, 4 to 5%.
 - b. Jobs whose price was over \$100,000, 1 to 4%.

The principal reason for these complexities derived from Government specification, bid forms and terms and conditions which were extremely voluminous and detailed.

2. Same decision making structure used by the Government, regardless of the size or nature of the needs.
 - a. Jobs less than \$100,000, 4 to 5%.
 - b. Jobs over \$100,000, 1 to 4%.
3. More continuous customer liaison experienced during entire procurement process from bid to delivery and installation, 1 to 2%.
4. Full time resident inspection on contracts over \$500,000, on-site testing, demonstration and acceptance, 1 to 2%.
5. Inclusion of military specs or other customer requirements, 10 to 200%.
6. Increased documentation requirements, 5 to 10%.
7. Requirement for systems identity, 2 to 10%.
8. Government inflexibility with respect to specifications, 10%.

Thus, the range measuring from a conventional commercial job base standard of 100%, could range from a minimum of 21% to a maximum of 244% for selling the same item to the Government.

MDC Standard

MDC proposed an insight into the problems of Government over-reliance on procedures and requirements by looking at a typical full-scale development program which had to contend with thousands of contractual documents, most of which MDC claimed were more appropriate for production contracts than development. MDC summarized the typical numbers of Government and commercial contractual requirements at the beginning of full-scale development and subsequent paperwork submittals to be the following:

<u>FSD Contractual Requirements</u>	<u>Government</u> (F-15)	<u>Commercial Customer</u> <u>Plus FAA</u> (DC-10)
<u>Program Plans</u>		
Management Systems	20	0
Other than Management Systems	20	1
Specifications	210	9
Data Item Descriptions	300	0
Documents - Original Callout	550	10
Total Documents - Including 2 Tiers of Referenced Documents	11,000	50
Pages of System Peculiar Specs	16,000	400
<u>FSD Paperwork Consequences</u>		
Contractual Specification Changes	2,000	480
Separate Data Submittals	30,000	250

MDC did not offer a dollar value for converting pages of paperwork consequences to distinguish the actual cost between a Government and commercial customer. However, any common industry "standard" of

paperwork generation and handling cost could be utilized to see, on a gross basis, the significant differences between sales to the Government and sales in the commercial marketplace.

GAO Study of MDC Commentary

The objective of the GAO study was to assess the potential for reducing "red tape" imposed on DOD contractors without impairing the integrity of the procurement process or necessary Government controls.

McDonnell Douglas Corporation, St. Louis, was one of three DOD contractors selected by GAO for an indepth survey.

The objective was to determine whether it was feasible to show that specific Government paperwork requirements imposed in connection with specific Government contracts or RFPs could have been avoided, or reduced, at a savings to the Government and without the Government's interest being harmed.

The principal thrust of GAO's Project Red Tape became review and reporting of DOD efforts to control and eliminate unnecessary "red tape" and to use specific examples of questionable red tape to support a conclusion that DOD efforts needed to be intensified. This thrust must be distinguished from the original objectives of the GAO study which were to compare and contrast sales of a similar item to the Government and to the private sector.

Categories of red tape concerns included the following: data requirements, military specifications and standards, management systems and related validations and demonstrations, audit and reviews, public laws, DOD instructions and directives, DOD contract administration functions, OMB circulars, procuring agency regulations ASPR, etcetera. The bulk of GAO efforts were concerned with policies and procedures to acquire major weapons systems because:

1. The greater part of McDonnell Douglas's business with DOD was the development of production of major weapons systems.
2. Red tape requirements were more apt to be imposed on major acquisitions.

In a detailed analysis and follow-through on the MDC reply to the Comptroller General's letter of July 1975, an analysis was made of the MDC letter of October 1975, including "Federal Government Aspects Which Entail Unnecessary Expense."

GAO conducted a detailed review with Mr. Brent Hardesty, who was the author of MDC's report to the Comptroller General. At the time, he was the Director, Technical Management Systems.

It was the conclusion of GAO in their analysis that all of the topics outlined in the MDC report had already been, or were currently being, addressed and presented either to DOD, or OMB, or various congressional committees, by letters and reports written by various industry associations.

An analysis by GAO suggested that a major portion of MDC's report consisted of verbatim excerpts from these industrial association letters and reports.

The subjects of concern to MDC were quite broad and did not address specific items of doing business with the Government. In GAO's judgment, Brent Hardesty indicated that MDC was not interested in identifying or focusing attention on specific items that could be identified with specific contracts.

In regard to cost estimates attributable to the problems expressed in MDC's report, such as "over-regulation," certain "ball park estimates" were provided in MDC's report. For example, "3 to 10% of full-scale development cost, typical is 4%." Or again, "1 to 8% of full-scale development, depending on reasonableness of the validation, demonstration, and surveillance requirements." These generalized cost concepts were determined to be verbatim statements from an Electronics Industries Association letter dated January 1975 and could not be supported by any MDC analysis or calculation.

According to GAO, Mr. Hardesty said it would be impossible to provide realistic cost amounts for specific non-essential contract requirements or paperwork, because costs are not accumulated in the cost accounting system to segregate out such costs. In most cases, these costs are lost in overhead, indirect cost accounts.

MDC enumerated a number of issues and practices which in their opinion added excess cost to doing business with the Federal Government. The essence of the MDC position was that the fundamental cost of inefficient practices was due to "over-regulating" rather than simply identifying a basic requirement or goal. Thus, Government regulations specified detailed actions that every contractor must follow to fulfill a requirement or pursue a goal.

In GAO's opinion, most problem areas MDC considered important were too broad in nature, difficult to assess readily, and would certainly need to be broken down into individual surveys.

Summary

Neither the issue of "over-regulation," a "formula" approach to analysis of "over-regulation," or "back-up costs," permitted GAO to evolve a methodology for capturing and detailing specifics of what was alleged to be excess Government control or for detailing specifics of costs related to any of these allegations.

Project Red Tape was never published by GAO. The nearest approach to a methodology for capturing cost differences between sale of an item to the Government and to the private sector lay in generalized, summary approaches, like "number of pages of reports," none of which were translated into verifiable dollar impacts.

TASK 4

Identify, explain, and graphically illustrate significant differences in policies, procedures, and unique practices faced by a firm in proposing to and contracting with the ATCA System Program Office versus doing business with commercial firms for standard commercial items having a contract value in excess of \$100,000.

The accomplishment of this task involved research of business practices of commercial firms contracting with commercial customers and comparison of the results with the investigations of the KC-10 acquisition contract. Further, background research of Government procurement principles was conducted to elucidate the basic differences in private and Government contracting as currently practiced.

A. CONTRACT TERMS AND PROVISIONS

Generally, the same basic legal principles that govern private contracts apply to Government contracts; however, there are several exceptions of which a potential contractor must be aware because of the unusual status of the Government as a contracting party. The fact that public funds are being expended in Government contracts imposes unique obligations and responsibilities on both Government personnel and contractors. The basic differences between private and Government contracting are:

- Dual Personality.^{1/} The Government receives special treatment from the courts as a contracting party because of the dual personality of the Government as a contractor and as a sovereign. The Government

^{1/} AFM 110-9, Procurement Law, Dec. 70, Para 2-4a.

is not liable for an obstruction to the performance of its contracts resulting from its public and general sovereign acts, whether executive or legislative.

- Immunity from Suit.^{2/} As an incident of its sovereignty, the Government is immune from suit, except to the extent that it has voluntarily consented to be sued. This immunity extends not only to suits naming the Government as a defendant, but also to actions against property owned by the Government.

- Applicable Law.^{3/} In determining questions arising under Government contracts, courts are not bound by the law of any particular state as in private contract cases. Federal common law will be applied in cases involving Government contracts where the question to be determined is not governed by the Federal Constitution or Federal Statute. Where the Federal interest is not compelling, State law may be applied, especially where the litigation is between private parties.

- Authority of Government Representatives.^{4/} In the exercise of its power to contract, the Government, like private corporations, must operate through agents and subagents. The authority of persons who act on behalf of the Government stems from the Constitution or from a Federal Statute. This requirement for specific authority distinguishes him from a private citizen who is free to contract in any manner not specifically prohibited by law.

^{2/} Ibid., Para 2-4b.

^{3/} Ibid., Para 2-4d.

^{4/} Ibid., Para 2-6

o Limitations on the Authority of Government Representatives.^{5/}

In the field of agency law, private persons are liable as principals to the extent of the powers they apparently have given to their agents, whereas the Government generally is liable only to the extent of the authority it has actually given to its representatives. The doctrine of "apparent authority" is inapplicable to the Government. If a Government contracting officer enters into a contract for which authority is absolutely lacking because there is no statute or regulation to support such action or because his action is positively prohibited, such contract is void and does not bind the Government. In essence, the basic difference between private and Government contracting is that the private party asks "Is there any law which prevents me from taking this contract action?" Whereas, the Government representative must ask, "Is there any legal authority which permits me to take such action?"

The Department of Defense (DOD) method of contracting for acquisition is unique in that the DOD component, as a buyer, prescribes the terms and conditions on which a potential contractor must sell to the DOD. These terms and conditions may have been dictated by Federal statutes, Executive Orders, restrictions in Appropriations Acts, DOD and/or Military Service policies. Thus, the Air Force, as the DOD component buying the KC-10, had only the limited flexibility permitted by the DAR deviation procedures to attempt to adopt a commercial acquisition mode.

When the contractor selling the KC-10 to the Air Force under the above conditions, sells a commercial DC-10 to an airline customer, the

^{5/} Ibid., Para 2-7.

seller establishes the terms and conditions of the sale in a formal bilateral "Purchase Agreement" based on his standard commercial practices established over many years of selling in the commercial environment.

The Air Force contract for the KC-10 acquisition contains 99 General Provisions and 41 Special Provisions, a total of 140 conditions of the contract (see Exhibit 3, Task 1). In contrast, the McDonnell-Douglas Standard Purchase Agreement for the DC-10 Series 30/40 aircraft contains 23 articles and seven exhibits. The contents of the standard commercial agreement are identified in Exhibit 1. Occasionally, the Standard Purchase Agreement is supplemented with a Letter Agreement. Subjects covered in such Letter Agreements are contained in Exhibit 2. Some of the commercial purchase terms and conditions, notably the contractor's Commercial Warranty and Service Life Policy, the article covering Indemnity Against Patent Infringement and Warranties from Other Manufacturers, and specific identity of the parts of the aircraft covered by the Warranty and Service Life Policy, are included in the Air Force contract.

Other differences in contractual coverage between the Air Force contract and the contractor's commercial purchase agreement are:

1. Progress Payment

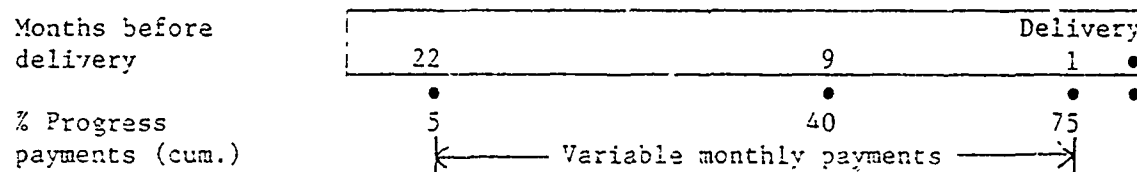
KC-10: The contract provides for progress payments based on cumulative costs incurred. A monthly progress payment schedule, starting at 22 months before delivery of aircraft systems, is included in the contract based on cumulative percentages that do not exceed 80 percent of

the estimated incurred cost of each aircraft at each month designated. The first payment at 22 months before delivery is equal to five percent of the aircraft price. Subsequent monthly payments vary, reflecting accumulative costs incurred, reaching 75 percent at one month before delivery. Final payment is made upon delivery and acceptance of the aircraft by the Air Force. For the first aircraft system, progress payments are equal to 75 percent of accumulated incurred costs one month before first flight, an additional 15 percent is paid on completion of the first flight, with final payment made on delivery and acceptance. Under the terms of the contract, title to that portion of the uncompleted aircraft system covered by the progress payments is vested in the Air Force.

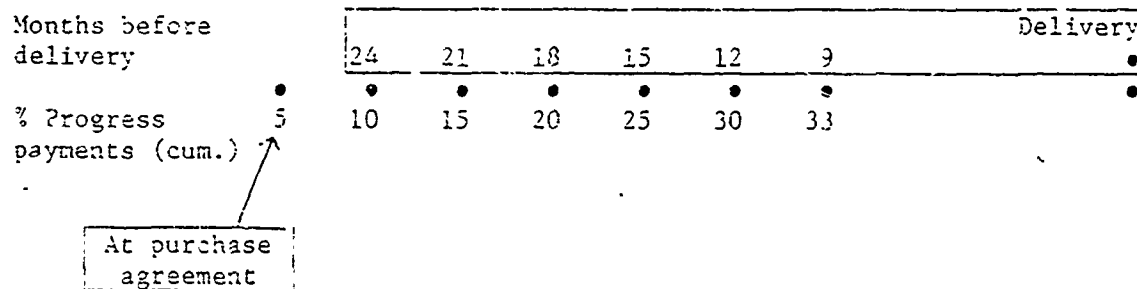
DC-10: The contractor's commercial purchase agreement provides that the buyer shall make an initial payment of five percent of the price of the aircraft concurrently with the execution of the purchase agreement. On the first day of the 24th month prior to scheduled delivery and on the first day of each succeeding third month through 12 months, the buyer shall pay another five percent. On the first day of the ninth month before delivery, another three percent is paid for a total cumulative progress payment of 33 percent. From that date, 33 percent of any adjustments in price is paid when identified. Final payment is made on delivery and acceptance of the aircraft under the terms of the purchase agreement; the buyer does not acquire any special property or insurable interest in any aircraft by virtue of progress payments prior to acceptance and final payment for the aircraft.

The progress payment provisions of the Air Force contract are considerably more favorable to the contractor than are the payment provisions of the commercial purchase agreement. At nine months before delivery, the Air Force progress payments total 40 percent of the accumulated incurred costs compared to 33 percent of aircraft price paid by commercial buyers. However, the Air Force continues to make progress payments up to one month before delivery, with an accumulated total of 75 percent. The difference in payment for the KC-10 versus the DC-10 amounts to a considerable number of dollars that the contractor does not have to finance for the Air Force acquisition. A comparison of progress payments for the KC-10 and DC-10 is shown in the following graph:

KC-10 PAYMENT SCHEDULE



DC-10 PAYMENT SCHEDULE



2. Delivery

The Commercial Purchase Agreement provides that the buyer shall be responsible for all costs and expenses incurred by the seller for storage, insurance, preservation, preparation and protection if the buyer fails to take delivery within 7 days after the date on which the seller tenders delivery.

The AF KC-10 contract does not contain any liability provision for failure of the Government to take timely delivery.

There are no liquidated damages, default or other penalties in the basic commercial purchase agreement to protect the buyer in the event the seller does not live up to his delivery schedule, whereas the Air Force contract provides for the possibility of termination for default.

3. Excusable Delay

The Commercial Purchase Agreement contains an article entitled "Excusable Delay." It relieves the seller from responsibility and default for Acts of God or the public enemy. (This is the only reference to default in the Purchase Agreement. Its coverage is similar to paragraph c of the DAR Default Clause.) The second part covers loss, destruction, and damage before delivery. These conditions are also classed as excusable delays which relieve the seller and cause termination unless the buyer gives notice within one month after the loss that he wants a replacement. The seller is then obligated to replace the aircraft unless such action would require the reactivation of a production line. The third and fourth parts provide for termination for excusable delays.

These provisions permit termination by either party within one month after 15 months of delay have passed. If no action is taken at that time, either party may again terminate within one month and after another six month have elapsed and within one month each six months thereafter. If either party fails to exercise such right of termination, such party shall have no right to terminate pursuant to this Excusable Delay article.

There is no other provision in the Purchase Agreement for termination of the purchase.

The AF KC-10 contract contains both the mandatory "Default" clause which provides for termination, and the "Termination for Convenience of the Government" clause whereby the Government can terminate the contract for costs without penalty for loss of contractor profits.

4. Demonstration and Acceptance Flights

The Commercial Purchase Agreement permits five representatives of the buyer to go on test flights as observers. The seller will have complete control and bear all costs of the test flight. Also the "seller agrees to indemnify and hold harmless the buyer, its officers, agents and employees (1) from and against all liabilities, damages, losses, costs and expenses for all injuries to and deaths of persons, excepting injuries and death of buyer's representatives participating in any such flights, and (2) for loss of or damage to tangible property of third parties not employed by buyer or claiming through or by reason of the death of any such employee, whether or not caused by buyer's negligence,

arising out of or in connection with the operation of the aircraft manufactured hereunder, during all tests and flights thereof prior to delivery...."

The AF KC-10 contract contains the DAR Ground & Flight Risk clause wherein the Government assumes the risk of damage to, or loss or destruction of aircraft, and agrees the contractor shall not be liable to the Government for any such damage, loss or destruction. It covers only the loss, damage or destruction of aircraft. There is no AF KC-10 contract coverage comparable to the Commercial Purchase Agreement with respect to third party liability coverage.

5. Spare Parts

In the Commercial Purchase Agreement, the sale of spare parts is controlled by a "Parts Sales General Terms Agreement" which is quite comprehensive and restrictive. It commits the manufacturing contractor to maintain a stock of new spare parts as long as 10 DC-10 aircraft are operated by airlines and requires the buyer to purchase all its spares requirements from the aircraft manufacturer for the same period, with minor exceptions. The manufacturer agrees to hold his prices firm for at least 12 month periods and use his best efforts to get his vendors to do the same. The Agreement includes an extensive warranty of the spare parts and details the responsibilities of and procedures to be followed by each party in exercising the warranty.

The AF KC-10 contract makes no provision for spare parts inasmuch as the Air Force awarded to McDonnell-Douglas a separate contract (F33700-78-C-0003) for logistics support for the KC-10 aircraft. Under

the logistics support contract the Air Force will purchase the initial provisioning of spare parts to support contractor operation of a base supply at each MOB to support Air Force and contractor performed maintenance functions. The spare parts are covered by the contractor's Warranty and Service Life Policy contained in the KC-10 aircraft contract. Replenishment parts are to be made available by the contractor as part of the contract cost per flying hour.

6. Instructions and Data

The Commercial Purchase Agreement advises the buyer of what documentation, by name and number of copies, is included in the price of the airplane (para A & B - Exhibit 3). It provides for the buyer to purchase additional copies of the data and requires the buyer to covenant that he will not divulge the data for the design or manufacture of any aircraft or spare part.

The Air Force, in its KC-10 contract, is requiring two copies of all the commercial Instructions and Data furnished to commercial buyers plus three copies of each of 13 items of "Other Data" (para C - Exhibit 3). In addition, throughout the life of the aircraft contract the Air Force is requiring the contractor to submit various quantities of numerous reports at varying intervals as follows:

	Initial Engineering 1/3/78 - 11/30/78		Final Engineering 12/1/78 - 10/31/80		Production 11/1/80-1985	
	No. of Reports	Total Copies	No. of Reports	Total Copies	Re- ports	Cop- ies
Total requirement per CDRLS	60	765	72	745	39	429
Distribution to JPO	58	464	72	462	39	290
Distribution to SAC	58	35	72	79	39	48

The total copies reflected, e.g., 765 copies, represent the one-time distribution requirements of the 60 reports. No attempt has been made to measure the total distribution based on the frequency of the requirements.

7. Excess Profits

The Air Force contract is a fixed price contract with provisions for economic price adjustment. It was priced according to the contractor's commercial pricing procedure. Based on the contractor's commercial sale experience (281 DC-10's delivered; 359 firm orders plus 48 options, which includes 213 series 30 freighter aircraft), the Air Force accepted the contractor's DD Form 633-7, "Claim for Exemption for Submission of Certified Cost or Pricing Data" for the basic aircraft and determined that the KC-10 basic aircraft procurement met the criteria of "adequate price competition" and "established catalog or market price of a commercial item sold in substantial quantities to the general public."

To this point the procedure for pricing a sale to the Air Force and to a commercial customer is the same. Both agree to a basic fixed price without submission of cost data or audit and agree upon price escalation procedure and payment provisions. However, despite the fixed price, the Air Force contract contains a mandatory clause contained in DAR 7-104.11 (a) entitled "Excess Profit." This clause expresses the requirements of Federal Statute at 10 US Code 2382, Miscellaneous Procurement, relative to Aircraft Contract Requirements. This statute states in part that the Secretary of a Military Department may not contract for the manufacture of all or part of any complete aircraft unless the manufacturer agrees, among other things:

"(2) To pay any profit in excess of 12 percent of the total contract price into the Treasury.

(4) That the books and manufacturing space may be audited and inspected.

(5) To make no subcontract unless the subcontractor agrees to the above conditions."

This has the effect of negating the role of competition in the commercial market as a determinant of fair and reasonable price for competitive fixed price contracts.

There is no comparable or similar provision in the Commercial Purchase Agreement.

3. STATEMENT OF WORK

The Statement of Work for the KC-10 acquisition contract was analyzed and industry personnel interviewed to determine the differences in policies, procedures and practices between the acquisition of the KC-10 by the Air Force and the acquisition of a commercial airplane by commercial customers. While all of the requirements of the KC-10 Statement of Work reflect some differences in the acquisition of the KC-10 from normal commercial practices, most of those requirements so closely paralleled commercial practices as to cause no major problems in compliance. Those requirements that illustrate significant differences from commercial practices are discussed below.

1. Specifications, Standards and Data Item Descriptions

The management philosophy of the Air Force for the acquisition of the KC-10 is to make maximum use of commercial practices, FAA certification

procedures and company formats for required data, and to use military requirements only where there are no applicable FAA or commercial standards or where they do not meet Air Force needs. The contract Statement of Work for the acquisition of the KC-10 called out 20 different military specifications and standards; 10 were referred to for guidance and intent and the remaining 10 were specific requirements. The contractor's formats were considered to be acceptable as long as the criteria of the specifications and standards were met. The 20 military specifications and standards contained in the Statement of Work for the modification of the DC-10-30F to the KC-10 are balanced against a nominal 200 military specifications and standards required for the new development of a military aircraft weapon system.

The Contract Data Requirements List (CDRL) for the KC-10 acquisition contains approximately 100 different data requirements, many of which are extended throughout the various option periods. While the data requirements make maximum use of company formats, the detailed information requirements of Data Item Descriptions must be addressed. The 100 different data items required in the contract to convert the DC-10-30F to a KC-10 are compared to a nominal 300 different data items required for the new development of a military aircraft weapon system.

In commercial practices for the development of aircraft for commercial customers, the contractor maintains company procedures and practices which are annually reviewed and approved by FAA. The contractor is required to develop aircraft in accordance with nine FAA specifications and standards. No data requirements in accordance with specific Data

Item Descriptions are levied by the FAA or commercial customers although the contractor makes certain items of technical data available to both.

In summary, the KC-10 contractor must meet the requirements of the nine FAA specifications and standards for the development of the basic airplane and meet the criteria of 20 military specifications and standards for the conversion of the basic airplane to the KC-10 configuration. The Air Force rationale for requiring military specifications and standards in lieu of FAA standards is based on the safety orientation of the FAA specifications rather than performance and where performance is a prime consideration, military specifications are used.

Comparison of Military and Commercial Requirements

	<u>New Military Development</u>	<u>KC-10</u>	<u>Commercial Customers</u>
Specs & Standards	200	20	9
Data Item Descriptions	300	100	0*

* Under commercial contracts, manufacturers normally make available manuals (maintenance, flight crew operations, wiring diagrams, etc.), publications (parts lists, weight and balance report, etc.) and engineering documentation (drawing index, set of Douglas Standards, etc.), but are not required to provide management plans, periodic progress reports, and other documentation such as required by the CDRL.

2. Management Plans

The data item requirements for the KC-10 acquisition included 19 different management plans. The Human Factors Test and Evaluation Plan was made an annex to the System Test and Evaluation Plan and the

Reliability and Maintainability Plans were combined, leaving a total of 17 management plans required.

The contractor's management procedures are documented in a number of company handbooks and publications in accordance with the needs of the various functional groups within the company. In preparing the management plans for the Air Force to include the information required by the Data Items Descriptions, information must be pulled together from a number of company source documents. Although the information required is available in some form or another, the integration of data into a management plan as called for by the Air Force can entail a considerable expenditure of manpower for the preparation and review by corporate level officials.

Commercial customers do not require specific management plans covering the contractor's procedures for managing the development and production of the airplane. From the contractor's point of view, the requirement for management plans by the Air Force reflects excessive documentation and checking of the contractor's ability to manage a program, particularly after he had developed, produced, certified and flown a large number of airplanes of the commercial version.

The Air Force bases its need for documented management plans on its management responsibility for major acquisitions involving large amounts of appropriated dollars and on the requirement for information to respond to inquiries from higher echelons of command, including congressional committees.

3. Configuration Management

The KC-10 acquisition contract requires that all Engineering Change Proposals (ECPs) which would affect KC-10 peculiar specification requirements, price, delivery schedule, specified weight or performance, specified interchangeability requirements, the KC-10 maintenance and logistics support concept, or require re-identification of a provisional spart part or spare assembly be processed as Class I ECPs. Routine Class I ECPs (other than Emergency, Urgent, or Comparibility ECPs) proposed by the contractor require an Advanced Change/Study Notice (ACSN) to be submitted and approved by the Air Force before any effort can be started on the study for preparation of the ECP. Routine Class I ECPs proposed by the Air Force do not require an ACSN.

The ACSN includes an identification of the item affected, an explanation of the need for the change, a technical description of the modification or study needed in sufficient detail for understanding of the problem to be corrected, a listing of alternative ways to meet the need for change noting the desirability and cost estimates for each, and a cost estimate for development and production of the proposed change. An approved ACSN is the document which allows the contractor to submit a Class I ECP. The Class I ECP provides detailed engineering data and drawings for the evaluation of the proposed change and, for the KC-10 program, a not-to-exceed price and other information for contractual purposes. If the proposed change is technically approved, a firm fixed price is negotiated before final approval is given by the Air Force.

Standard commercial changes (Class II ECPs) (those that do not fall within the Class I ECP criteria) can be made to the basic aircraft without Air Force approval provided a Specification Change Notice (SCN) is submitted to the Air Force concurrent with its release from engineering for concurrence in classification and approval. The Air Force reserves the right to delete any Class II changes not desired by the Air Force and the contractor may pursue the engineering change as a Class I ECP.

In commercial practice where the producer proposes to make a Class I type engineering change (major changes that affect price, performance, schedule or maintenance) after the aircraft design has been set, customers are notified of the potential value of the change with estimated costs and a statement of interest is solicited. If most of the customers desire the change the contractor incorporates it in the airplane. Standard commercial changes are made by the producer and customers may or may not be notified, depending on the nature of the change.

4. Computer Programs

For the KC-10 acquisition, each new computer program must be managed as an individual configuration item with a development specification, a product specification and a version description document required to be prepared in accordance with military standards. In converting the DC-10 to a KC-10 configuration, only one new computer program, for the control of the aerial refueling boom (ARB), is needed. That computer program, after the control of the ARB has been satisfactorily demonstrated, will be hardwired into the computer for operational use of the system.

Computer programs which are to be hardwired into the computer (referred to as firmware) are used for equipment or components where the operational mode is expected to remain unchanged. The documentation required for the KC-10 firmware is the same as that required for software where future changes in operational modes are anticipated and documentation to control the software configuration is needed.

In commercial practices, a contractor prepares a Computer Software Quality Program Plan in accordance with FAA-STD-018 which outlines the flow process, validation of technical requirements, testing, evaluation criteria, etc. Sufficient documentation is made available to authenticate the computer program although, in the case of firmware, the validation of the computer program rests in the demonstration of satisfactory operation of the equipment.

5. Support Equipment

Proposers were required to submit a Consolidated Support Equipment List (CSEL) with Support Equipment Recommendation Data (SERD) for each item of ATCA peculiar support equipment as a part of their proposal. The subsequent KC-10 contract Statement of Work required the contractor to initiate nonrecurring design and engineering effort for those items listed only after each SERD had been approved by the Air Force. As additional requirements for peculiar support equipment are identified, the contractor must submit a SERD for each item to the Air Force and obtain approval before detailed engineering design of the item can be started.

The SERD requires documentation of a functional analysis, adequate engineering data for a complete technical description, level of maintenance (organizational, intermediate, or depot level), cost of ownership, useful life, etc., and, for the KC-10, a firm fixed price for development and production of the item. The most troublesome problem for the contractor is to establish a firm fixed price for a support equipment item before the detailed engineering design has been started, particularly where subcontractors are involved.

In commercial practices, the contractor may design and/or recommend support equipment for the customer but rarely does the contractor build or buy support equipment. Commercial customers maintain their own logistic support systems and are responsible for the acquisition of their own support equipment.

6. Contract Work Breakdown Structure

The KC-10 is being produced on a common DC-10 production line with KC-10 modifications being made on-line. It is estimated that the KC-10 will be approximately 88 percent common with the DC-10-30F. DC-10 aircraft are currently being produced at a rate of 41 aircraft per year, of which two will be KC-10's. The acquisition contract requires a Contract Work Breakdown Structure (CWBS) for reporting schedule performance for the KC-10. A work breakdown structure is a product-oriented family tree division of tasks which organizes, defines, and graphically displays the product to be produced, as well as the work to be accomplished to achieve the specified product. From the CWBS, the contractor must establish a Program Master Schedule, an Engineering Master Milestone Schedule, and

a First Article Preproduction Schedule for the KC-10. In view of the production strategy where the KC-10's are intermixed with the production of DC-10's, the difficulty arises in establishing a CWBS applied only to the KC-10 aircraft which would be meaningful in reporting schedule performance. Although the manhours expended in preparing a CWBS for the KC-10 were not specifically recorded, it was reported that an extraordinary amount of key personnel time was spent in developing CWBS data as required by the CDRL. The CWBS which was submitted by the contractor is not being used by the Air Force for assessing KC-10 schedule performance in deference to other information. Commercial customers do not require such detailed scheduling information.

PURCHASE AGREEMENT
between
McDONNELL DOUGLAS CORPORATION

DC-10 SERIES 30/40

INDEX

Article

DATE OF CONTRACT AND CONTRACTING PARTIES

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DOMESTIC

The following are subjects typically covered by Letter Agreements to Douglas commercial Purchase Agreements:

1. Performance Guarantees

Airlines often want guarantees that the aircraft will carry a full payload on certain missions.

2. Bank Financing

Many foreign customers require assistance in obtaining export/import bank financing and occasionally a domestic airline will require assistance in arranging financing with banks.

3. Liquidated Damages for Unexcused Delivery Delays

Certain airlines prefer to agree in advance as to penalties associated with delays that are not excused under the excusable delay article of the Purchase Agreement.

4. Government Approval

A number of foreign airlines are government owned and will frequently require a provision in the Purchase Agreement making the purchase conditional until government approval is received.

5. Board of Directors Approval

Foreign and domestic airlines occasionally require the purchase be conditioned on Board of Directors' approval subsequent to Purchase Agreement execution.

6. Flight Test

Douglas occasionally requires the use of one or more of the aircraft being purchased by the buying airline to enable it to do flight testing for certification purposes.

7. Trade-In of Used Aircraft

Some airlines believe it advisable to trade in used aircraft on new aircraft purchases. Occasionally Douglas will agree.

COMMERCIAL DATA

The following items are furnished to airline customers and are included in the normal commercial price for a DC-10.

A. MANUALS AND PUBLICATIONS

	<u>Quantity</u>
o Maintenance Manual -----	1
o Illustrated Parts Catalog -----	5
o Structure Repair Manual -----	5
o Component Maintenance Manual -----	5
o Flight Crew Operating Manual -----	1
o Wiring Diagram Manual -----	3
o Weight and Balance Manual -----	3
o Weight and Balance Supplemental Report -----	3
o Actual Weight and Balance Compliance Report ---	3
o Nondestructive Test Manual -----	3
o Service Bulletins -----	6
o Illustrated Tool and Equipment Lists -----	6
o Ground Equipment Manuals -----	6

B. ENGINEERING DOCUMENTATION

o Specification List (Drawing Index) -----	1
o Aperture cards of all drawings including detail, installation, and assembly of all parts -	1
o Drawings for all Douglas-designed Special Tools and Equipment -----	1
o One set of Douglas Commercial Process Standards (DPS) -----	1
o One set of Douglas Standards (DS) -----	1
o One set of Douglas Material Specifications (DMS) -----	1
o Drafting Room Manual -----	1

C. The following data are required by the Air Force in three copies each:

- o Complete ATA Specification 200 Provisioning Data
- o Air Transportability Manual
- o Troubleshooting Instructions (FEFI/TAFI)
- o Power Plant Buildup
- o Cargo Loading
- o Flight Engineer's Reference Manual
- o MEL Procedures Manual
- o Vendor Warranty Manual
- o Maintenance Facilities and Equipment Planning Manual
- o Line/Dock Manual
- o Vendor Component Manuals
- o Douglas Service Magazine
- o DC-10 Flight Magazine

Exhibit 3

TASK 5

Develop a method of identifying and measuring the differences in internal management and regulatory requirements for specifications, packaging, marking, quality control practices and configuration management between the KC-10 program and common commercial practices.

The methodology developed for the conduct of the KC-10 case study to identify data elements, collect data and determine the cost, schedule and administrative impact of Government imposed requirements was used to identify and measure the differences between the KC-10 program and common commercial practices. Specifically:

1. The preliminary review and analysis of the KC-10 acquisition and logistics support contract terms and provisions and statement of work identified Government imposed requirements which are not imposed in commercial contracts. Those requirements considered by the researchers to have a potential impact on the KC-10 program were documented as data elements to be further investigated and analyzed. The requirements not documented as data elements were considered to be minor differences between KC-10 and common commercial practices and reflected procedures that are closely parallel between the two.

2. In the process of collecting data, information on common commercial practices was gathered with respect to how the function would have been accomplished in the absence of the Government imposed requirement. Comparative analyses of typical commercial contracts and the KC-10 contracts were conducted. The differences noted formed the basis for data collection toward determining differential impact in cost, schedule and administration.

3. The detailed analysis of data collected in reference to each data element resulted in a determination of impact on the KC-10 program which would not have been incurred if the KC-10 had been acquired in accordance with common commercial practices. The impact identified was based for the most part on additional internal management workload necessary to comply with the Government imposed requirements. It should be pointed out that a number of the regulatory requirements contained in the KC-10 contracts are required by statute or Executive Order, making compliance mandatory in commercial practices regardless of inclusion in the KC-10 contracts.

The differences between the KC-10 program and common commercial practices which have been identified and measured are addressed throughout this report. For reference:

- Treatment of specifications and configuration management including internal management procedures is included in Task 4.
- Packaging and marking are addressed in Task 7.
- Quality Control Practices are not specifically treated in this report: inasmuch as the requirements for KC-10 closely paralleled commercial practices and no discernible differences were noted.
- Regulatory requirements based on statute and Executive Order are listed in Exhibit 3 to Task 1.

TASK 6

It is recognized that the Air Force and Department of Defense perform the acquisition and contracting function within a national statutory and policy environment. Hence, based on the findings, recommendations and conclusions of the KC-10 prime contractor case study, the contractor shall perform a rigorous analysis of, and provide suggested revisions to, appropriate Air Force/DOD policies, directives, regulations, specifications, and requirements to facilitate their application within existing statutes and national policy.

The DOD procurement process has been utilized to an ever increasing degree as the vehicle for the imposition of national policy, primarily in the socio-economic area, through Federal statutes and Executive Orders. As a result the number of terms and conditions of a DOD contract continues to increase and selling to the DOD becomes more burdensome. The DAR and its predecessor, the ASPR, were tailored to the acquisition of military supplies and equipment made to Military and Federal specifications. Very little, if any, consideration in the form of policy and procedures was developed and included for the acquisition of commercial products and commercial type products. Simplified purchase procedures which are appropriate for commercial products are restricted to an arbitrary maximum expenditure of \$10,000, which is also the threshold above which many contract provisions become applicable.

This study revealed a need to recognize that a contractor who furnishes a commercial product or slightly modified commercial product to the Government from a commercial production line should not be subjected to different terms and conditions with respect to the item being purchased by DOD than it would be for the same items being purchased by

commercial customers. It further reveals a need to simplify DOD contracts through the elimination of the many terms and provisions which are self-deleting because of the circumstances of the purchase.

Revisions to the DAR to recognize these points, to define commercial products and subcontracts, and to amend RFPs to provide bidder inputs thereto are proposed as follows:

A. SOLICITATIONS OF BIDS, PROPOSALS AND QUOTATIONS

There is currently no provision in the DAR which encourages or even alerts acquisition personnel to the desirability and benefits to be gained by submitting a draft of an RFP or RFQ to representatives of an industry to solicit suggestions for cost savings through the identification of unnecessarily constraining specifications or provisions. Likewise, there is no guidance in the DAR with respect to circumstances and conditions which permit and encourage offerors on RFPs/RFQs to propose revisions and alternatives which will reflect their best business arrangements; thus offerors are reluctant to make recommendations for improvement because the acquisition climate does not provide for them. Further, the DAR coverage on deviations from the DAR (1-109), despite its stated intent not to stifle the development of new techniques or methods of procurement, requires such high levels of approval and such reporting requirements as to discourage any actions which, although beneficial and may improve the acquisition process and/or reduce cost, would require processing deviation requests.

The problem of structuring solicitations and purchase descriptions to acquire the least total cost commercial products and to achieve the

best business arrangements in accordance with the practices of the marketplace is addressed in the draft of Federal Acquisition Regulation (FAR) Part 11.^{1/} The proposed FAR Part 11 would require "Market Research and Analysis" prior to development of a solicitation to determine commercial product availability, distribution and support systems, and business practices of the marketplace before development of the purchase description and solicitation documents. It is proposed that the substance of the FAR Part 11 requirement for "Market Research and Analysis" as it is outlined by the OFPP be included in DAR 2-201 and 3-501 for use when commercial products are to be acquired.

It is also proposed that DAR 3-501(b)(3) Part I, Section C, xxxiii (currently marked reserved) be used to provide an optional provision substantially as follows:

"Offeror may propose revisions, deletions and/or additions to any provisions and/or requirements of this RFP which will represent offeror's best business arrangement, with complete rationale therefor, but without altering in any way the capability of the item to be acquired. Such suggested changes will not render the offeror's proposal non-responsive "

B. DEFINITION - COMMERCIAL PRODUCT, COMMERCIAL TYPE PRODUCT

The D.R currently does not contain in Section 1, Part 2, Definitions, a definition of a "Commercial product" or a "Commercial type product." DAR 3-807.7, dealing with adequate price competition, establishes the following "criteria" for a Commercial item.

1. Draft Federal Acquisition Regulation, Federal Register Vol. 44, No. 190. September 28, 1979, Notice of Availability and Request for Comment, FAR Parts 10 and 11.

A "Commercial type item" is only referred to in DAR 3-307.7 with respect to whether the price is based on established catalog or market prices of commercial items sold in substantial quantities to the general public. In making a determination of whether to require cost and pricing data, DAR 3-807.7(e) provides:

"(3) A price may be considered to be 'based on' established catalog or market price of commercial items sold in substantial quantities to the general public if the item being purchased is sufficiently similar to such a commercial item to permit the difference between the prices of the items to be identified and justified without resort to cost analysis."

DOD Directive 5000.37 dated 29 September 1978, Subject: Acquisition and Distribution of Commercial Products, contains the following definition:

"Commercial, Off-the-Shelf (OTS) Products (also referred to as 'Commercial products'). Products in regular production sold in substantial quantities to the general public and/or industry at established market or catalog prices."

The Federal Acquisition Regulation (FAR) proposed by the OFPP includes the following definitions:

"'Commercial Product' means an item, material, component, subsystem or services available from stock or regular production that is sold to the public at established catalog or market prices."

"'Commercial Type Product' means a commercial product or service that is modified with some Government-peculiar physical change or addition that is otherwise identified differently from its normal commercial counterparts."

A need exists to recognize that for Government acquisition purposes commercial products available from production and commercial type products which can be produced as part of commercial production should be considered equivalents with respect to the applicability of contract terms and provisions.

It is therefore proposed to amend DAR Section 1 Part 2 and DOD Directive 5000.37 at the OFPP definition and to recommend that the term "Commercial type product" be supplemented as follows:

"A commercial type product is considered to be a commercial product with respect to price analysis and mandatory contract provisions when the cost of the modifications/difference does not exceed 35 percent of the price of the basic commercial product."

The figure of 35 percent is a judgmental decision based on the DAR criteria for exemption from the requirement to submit cost and pricing data. DAR Manual No. 1, Chapter 8A, states that if 55 or more percent of a manufacturer's sales are at catalog or market price to the general public (45 percent to the Government) cost and pricing data need not be submitted to the DOD component when DOD buys the item. It is further based on the DAR Section 3, Part 10, Contractors Weighted Average Share in Cost Risk, which provides as one of its objectives "to minimize the extent of Government control, including controls exercised through Department of Defense prime contracts and subcontracts thereunder, thereby reducing costs." This concept provides that the DOD will not question the reasonableness of a contractor's incurred costs on DOD contracts when the contractor's cost risk as determined by a weighted dollar value by type of contract is 75 percent or greater (25 percent no or low risk). The 35 percent proposed is a median between the 45 percent of sales allowed to the Government and the 25 percent low cost risk thresholds of the two DOD techniques.

C. SUBCONTRACTS

The DAR, Section 1, Part 2, Definition of Terms, does not define a "subcontract." DAR General Provision 7-102.1, Definitions, states in subparagraph (c) that "except as provided in this contract, the term 'subcontract' includes but is not limited to purchase orders, changes and/or modifications thereto." Other definitions of the term are found in various sections and clauses of the DAR.

7-104.13 Renegotiation (Act. - par 103 g(1)). Subcontract means (1) any purchase order or agreement (including purchase orders or agreements antedating the related prime or higher tier subcontract) to perform all or any part of the work, or to make or furnish any materials required for the performance of any other contract or subcontract, but such term does not include any P.O. or agreement to furnish office supplies.

7-104.15 Examination of Records by Comptroller General. The term "subcontract" as used in this clause excludes (1) purchase orders not exceeding \$10,000 and (2) subcontracts or purchase orders for public utilities services at rates established for uniform applicability to the general public.

7-104.23, 7-203.3, 7-402.8 Subcontracts. As used in this clause, the term subcontract includes but is not limited to purchase orders, changes and/or modifications thereto.

7-104.40 Competition in Subcontracting. The contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum extent consistent with the objectives and requirements of the contract.

8-101.24 Termination of Contracts - Definition. Subcontract means any contract defined in 1-210.4 other than a prime contract entered into by a prime contractor or a subcontractor, calling for supplies or services required for the performance of any one or more prime orders for the procurement of supplies or services.

12-803(5) Equal Opportunity. Subcontract means any agreement or arrangement between a contractor and any person (in which the parties do not stand in the relationship of an employer and employee): (i) for the furnishing of supplies or services or for use of real or personal property including lease arrangements,

which, in whole or in part, is necessary to the performance of any one or more contracts; or (ii) under which any portion of the contractor's obligation under any one or more contracts is performed, undertaken, or assumed.

DD-1140-1 Defense Subcontracting Program Report. Combines subcontracts with purchases including defense portion of stock inventory and indirect items.

Recognizing that commercial products are normally either manufactured for off-the-shelf sale as the normal business routine, or for sale from regular production from stocks of raw material and in-process inventory not specifically procured for any particular contract, the general inference of the above definitions that the subcontract must be in direct support of the prime contract makes their application to the purchase of commercial and commercial type products by the DOD appear inappropriate. Commercial and commercial type products being manufactured for a DOD contract, incidental to and integrated with manufacturer's regular production, should be considered as regular production. They are supported through inventory and should not be subject to any distinction with respect to the clause content of subcontracts or purchase orders that support the production line because items for a Government contract are included. In order to clarify the application of DOD contract requirements to subcontracts in the procurement of commercial products proposed to be defined in DAR 1-201.42, the following policy statement concerning subcontracts for commercial and commercial type products is proposed for an appropriate section of the DAR:

Subcontract-Commercial Product (see DAR 1-201.42). Any orders, however described, placed by a manufacturer with vendors/suppliers for parts and/or components used in the manufacture of a commercial product or commercial type product for sale from stock (off-the-

shelf) or through regular production shall not be considered subcontracts for the purpose of flowing-down to subcontractors those conditions required to be imposed on subcontractors by Government prime contracts.

D. GENERAL PROVISIONS

Many of the standard General Provisions required by law, Executive Order, or imposed by DOD in all Government contracts over \$10,000 are of little if any benefit to the Government when included in contracts for commercially developed systems. Most of them are irrelevant inasmuch as they cannot be applied retroactively to products already produced (off-the-shelf) and they are difficult to enforce when applied to products being produced in regular production, only a portion of which is purchased by the Government. These provisions, in the aggregate, create a significant administrative burden to contractors who have developed and are producing commercial systems using established commercial practices or to contractors providing logistics support integrated with logistics support for commercial counterparts. Recognizing that many of the provisions have the purpose of protecting the economic well-being of the country, they are ineffective in that regard when applied to the acquisition and logistics support of commercially developed systems. Their inclusion in such contracts increases the Government and contractors cost of overhead as well as direct costs in providing or producing commercial systems or products for the Government without corresponding benefit.

It is proposed that DOD develop, and publish in DAR Section VII, a set of General Provisions tailored to contracts for acquisition and

logistics support of commercially developed, off-the-shelf systems. The following contract General Provisions are proposed as those basic clauses which should be required:

Definitions. (DAR 7-103.1)

Inspection. (DAR 7-103.5)

Payments. (DAR 7-103.7)

Discounts. (DAR 7-103.14)

Officials Not to Benefit. (DAR 7-103.19)

Covenant Against Contingent Fees. (DAR 7-103.20)

F.O.B. Origin (DAR 7-104.70), and F.O.B. Origin, Government Bills of Lading and Prepaid Postage (DAR 7-104.85)

or

F.O.B. Destination. (DAR 7-104.71), and F.O.B. Destination, Evidence of Shipment (DAR 7-104.76)

The following clauses should be included when applicable:

Changes. (DAR 7-103.2)

Title and Risk of Loss. (DAR 7-103.6)

Assignment of Claims. (DAR 7-103.8)

Federal, State and Local Taxes. (DAR 7-103.10(a))

Termination for Default. (DAR 7-103.11)

Responsibility for Inspection. (DAR 7-103.24)

Commercial Bills of Lading Covering F.O.B. Origin Shipments.
(DAR 7-103.25)

Pricing of Adjustments. (DAR 7-103.26)

Rights in Data. (DAR 7-104.9)

Examination of Records by the Comptroller General. (DAR 7-104.15)

Progress Payments. (DAR 7-104.35)

Interest. (DAR 7-104.39)

Limitations of Liability. (DAR 7-104.45(a))

Material Inspection and Receiving Report. (DAR 7-104.62)

F.O.B. Origin - Minimum Size of Shipment. (DAR 7-104.72)

Loading, Blocking and Bracing of Freight Car Shipments. (DAR 7-104.74)

Notice of Radioactive Materials. (DAR 7-104.30)

F.O.B. Origin - Government Bills of Lading and Mailing Indicia.
(DAR 7-105.2)

Approval of Contract. (DAR 7-105.2)

Report of Shipment. (DAR 7-105.4)

TASK 7

If existing socio-economic and environmental statutes, and national policies, prohibit the economical purchase of commercial items, they should be identified. Where possible, recommendations shall be developed to revise the implementing regulations without changing the intent of the statutes. If this cannot be accomplished so state and explain why.

The magnitude of Government purchases creates the opportunity for implementing selected national policies. While the enormity of Federal dollars expended for goods and services makes the procurement process an attractive vehicle for achieving social and economic goals, the effectiveness in the purchase of commercial products is perhaps overrated since sales of commercial products to the Government were estimated by the Commission on Government Procurement to be less than two percent of national commercial sales.

This study analyzes clauses for recommendations of revisions that are within existing statutes and regulations, without changing the intent of the statutes. This review of the KC-10 acquisition and logistics support contracts resulted in identification of 30 "socio-economic, environmental or national policy" contractual provisions adversely impacting the purchase of commercial products in varying degrees. Exhibit 1 contains the abbreviated title of each clause, the "root source" requiring the clause, and the DAR reference to the full text. An explanation of these column headings follows the Exhibit. Results of analysis with conclusions and recommendations where appropriate are provided for each clause on the Exhibit.

Procurement becomes more costly and time-consuming with the addition of each new social, economic, or environmental program. While the study contract refers to statutes and national policies that "prohibit" the economical purchase of commercial items, there is no evidence that any of these statutes or national policies "prohibit" economical purchase of commercial items. However, the cost burden in extra time and money of pursuing non-procurement objectives through the procurement process is patently significant even though these costs cannot be precisely measured or even meaningfully estimated.

Most of these contractual provisions stem from national socio-economic objectives; and they reflect national policies having no direct relationship to DOD military responsibilities. For example, nine of the clauses pertain to a contractor's work force in regard to working conditions, equal opportunity, hiring of handicapped workers, hiring disabled veterans, and safety and accident prevention. Four of the clauses implement national policy fostering the defense industrial base. Other clauses are diverse in their subject matter and purpose.

Potential Application of the Service Contract Act (Fixed Price)

The clause titled as above is contained in the support contract (Special Provision Number 19). The clause, and guidance for use, are in DPC 76-1. Its purpose is to have the contractor warrant that contract prices do not include any allowance for contingent application of the Service Contract Act (SCA) to the contract. It further provides that the contracting officer may unilaterally implement application of

the Act if required to do so by appropriate authority; and that prices will be adjusted in accordance with the clause.

The statute, the Service Contract Act of 1965; guidance in DAK 22-101, 22-106, 12-1001 to 12-1008; and the clause DAR 7-1903.41 "Service Contract of 1965," apply to"....any contract with the Federal Government, the principal purpose of which is to furnish services through the use of service employees...." (DAR 12-1002.1(i)). The Act provides that the Secretary of Labor is authorized and directed to administer and enforce the Act. DOD has no authority to relax or waive the clause.

If a determination is made that the Service Contract Act is applicable to the logistics support contract the contracting officer will be required to obtain DOL wage determinations for Douglas and for each subcontractor and supplier involved. A renegotiation of the contract price will be required with the consequent administrative costs to Douglas, its subcontractors and suppliers and the Air Force, in addition to a potential increase in operation and maintenance costs for the logistics support contract.

The Act would increase both contract costs and administrative costs:

- The contracting officer must request a wage determination from the Department of Labor on Standard Form 98. Each type of service must be specified, the location of the work to be done must be stated, and a copy of any collective bargaining agreement must be furnished if there is an incumbent contractor.
- The minimum wage determination tends to be the "average wage" for each class of service employee thereby eliminating the "below

average" wage rates for employees under the Act.

- The Department of Labor wage determinations do not recognize employee profit-sharing as a part of wages or benefits.
- The contractor must grant the Government the right to audit his accounts.
- Administration of the Act adds significantly to overhead expense for both the contractor and the Government.

Application of the Act to a contractor or supplier who is doing KC-10 component maintenance in a facility where the same component is having maintenance performed for a commercial customer could create a situation where the subcontractor may have to pay the worker doing maintenance on the KC-10 component different wages than the worker on the component of the commercial customer.

If a determination is made that the Act applies to this contract, a further determination needs to be made as to whether it will apply to all the services to be performed or just to the maintenance services. If the Act applies to the services required to provide full logistics support, which includes the purchase of spare parts, a determination will need to be made as to its applicability to those Douglas subcontractors who furnish the spare parts. The Service Contract Act currently applies to any subcontract of a contract subject to the Act.

The Act has a number of requirements that are implemented in the clause. Each service employee must be paid not less than the minimum monetary wage, plus fringe benefits, as determined by the Secretary of Labor. In any event wages must not be less than those specified by the

Fair Labor Standards Act. Contractors must notify each employee of minimum wages and fringe benefits. Contractor must not permit working conditions which are unsanitary or hazardous or dangerous to the health or safety of employees. Contractor must maintain detailed records of payroll information by name and address of employee for three years; and if there is an applicable wage determination, report wages for each class of employee to the contracting office. The clause also incorporates by reference all Department of Labor interpretations of the Act. Exemptions from the Act include work done under the Walsh-Healey Public Contracts Act, common carriers of freight or personnel, communications, public utilities, and other narrowly defined services. There is no reference to exemption of Government procurement of services commonly purchased by industry.

DCD/AF have little or no flexibility under the Act. Exemption for common commercial services might be discussed with OFPP to see if there is any possibility that the law might be amended. At this time, the National Council of Technical Service Industries is challenging the Act as being "...inconsistent with the desired effect of the Administration's anti-inflation voluntary pay guidelines."

The Computer and Business Equipment Manufacturers' Association (CBEMA) has expressed concern for the reasons explained in the following extract from a letter from CBEMA to the Department of Labor:

"...The 'prevailing' wage, as determined by the Department of Labor, would presumably reflect the average wage for any particular job classification at issue.

Our industry in general compensates its employees based upon a merit pay system. If a contractor has a merit pay system typical of our industry, the merit pay range for any particular

job classification will be distributed about the industry average wage for that job. As a result, approximately one-half the employees in this job would be earning less than the 'prevailing' wage. The contractor and its employees would be placed in a difficult position.

To comply with the SCA, in theory, the contractor could raise its salary structure so that the minimum for any job falls at the wage determined to be prevailing. This is not practical, however, since to do so would mean raising overall wage levels by 20 percent in order to do a small part of its business with the Government. Or the contractor could abolish its merit pay system. This also is not practical since to do so would adversely affect the productivity of its personnel in order to do a small part of its business with the Government.

The contractor could assign to Government accounts only those who earn the requisite wage rate. This differentiation of the work force into those who earn in the upper part of the merit pay range and those who don't, would be difficult to manage with employees dropping into and out of 'qualification' (as their performance varies or as they are promoted into another job level) and would adversely affect employee morale. The impracticality of servicing one customer with only 'qualified' employees and of keeping records thereof would compel the contractor to adopt a 'segregated' workforce.

A segregated workforce could be relatively manageable, but it would necessitate a single-rate compensation system for this limited workforce. The Government service employees would be disadvantaged in gaining product experience because of the increased travel, the limited scope of the equipment being serviced and the older nature of the equipment. Being a specialized workforce, they would be more susceptible to being laid off. Most importantly, the Government service representative would lack the opportunity for salary increases through superior performance in the job. Thus, the application of the SCA could hinder awarding salary increases to Government service technicians.

Of the various alternatives faced by the contractor, this last alternative, that of a 'segregated' workforce, although not a desirable way to manage the contractor's business, would be the only practical way left for the contractor to accommodate the fundamental conflict between industry merit pay compensation systems and the SCA. To repeat, this resolution would distinctly disadvantage the Government service employee."

Hewlett-Packard Co. and the Digital Equipment Corp. have announced that they are pulling out of the Government repair and servicing market.

Walsh-Healey Public Contracts Act

The clause titled as above is contained in both the aircraft and support contracts (General Provision Number 16). Neither the statute nor the clause contains any subcontract flow-down requirements.

This statute and the implementing DAR 12-602 make it mandatory to include a provision in all Federal contracts over \$10,000, including those for commercial products. This provision relates to (i) representations on whether the contractor is a regular dealer in or manufacturer of the supplies under contract, (ii) payment of prevailing minimum wage rates, (iii) 8 hour day 40 hour week working limitations, (iv) minimum age of employees, and (v) health and safety conditions. The clause requires the contractor to comply with all representations and stipulations required by the Walsh-Healey Act as well as all regulations issued thereunder by the Secretary of Labor. The specific requirements are not identified in the clause. However, for additional necessary details, DAR 12-602.3 suggests obtaining from the appropriate Regional Office of the Labor Department a copy of the publication entitled "Walsh-Healey Public Contracts Act, Rulings and Interpretations." This publication is 31 pages long. It is over 14 years old and does not contain the latest rulings and interpretations.

A 7-page amendment was published in 1978 entitled "Amendment to Regulation." The only sure way to ascertain current requirements, however, would be to examine the current Labor Department regulations on Walsh-Healey that are published in Chapter 50 of Title 41, Code of Federal Regulations (CFR).

It is readily apparent from the above that the burden placed on contractors who are not experienced in contracting with the Federal Government is significant, time consuming, and not conducive to promoting competition. The added burden of compliance, however, is negligible in the sense that nearly all contractors are subject to the provisions of the Fair Labor Standards Act (FLSA), and other laws enacted in recent years relating to health and safety that apply regardless of whether performance of a Federal contract is involved. These other laws regulate the same basic matters as Walsh-Healey, except with respect to eligibility criteria (Manufacturer or regular dealer). Thus the Act has little or no practical effect, except for eligibility and as an enforcement tool (possible default action) in administering the labor laws.

The administrative cost and burden borne by the Government far exceeds that of the contractor. Section XII of DAR covers Contractor Industrial Labor Relations. Part 6 is devoted entirely to Walsh-Healey, and contains several pages. In addition to the DAR, details are contained in Labor Department Regulations. Application of policies and procedures emanating from Walsh-Healey within DOD alone involve (i) contract placement personnel (pre-award surveys/eligibility criteria, insertion of clause in solicitations, obtaining eligibility certifications, etc.), and (ii) contract administration personnel (surveillance and enforcement). These two functions are supported by (i) training programs, (ii) legal advice, (iii) consultations with Labor Department (obtaining of interpretations and rulings). The need for training, knowledge, and expertise, is necessary throughout the civilian agencies as well. Moreover, the Department of Labor (DOL) maintains a staff to

administer this and other labor laws, including responses to questions, issuing regulations, rulings, and interpretations, etc.

In considering the potential for exceptions, language in Section 9 of the Act provides it shall not apply to purchases of such items "as may usually be bought in the open market...." According to the DOL, for purposes of this statute, this exemption applies only to emergency type purchases where usual Government purchasing procedures are not followed. This interpretation is based on the legislative history of the statute. It seems to contradict Labor Department interpretation of the Work Hours and Safety Standards Act which exempts contracts for items "bought in the open market," i.e., commercial items. This inconsistency was discussed with a Labor Department representative, who stated the apparent inconsistencies are based on the legislative history of each Act; that the intent of Congress in each case is clear, and that there is no possibility that Labor would modify its interpretation.

Accordingly, under present law, as interpreted by Labor, the contract clause covering Walsh-Healey is mandatory in all contracts for commercial products over \$10,000 except where negotiated under 10 USC 2304(a)(2) as provided in 12-602.2.

Section 6 of the Act permits the Secretary of Labor to make exceptions in specific cases "or otherwise when the public interest would be served thereby." A case might be made for an exception based on the following considerations:

1. The FLSA already prescribes rules on working conditions that would apply regardless of whether a Federal contract is involved.

2. Occupational Safety and Health Act (OSHA) regulations imposed on private industry (without Federal contracts) deal with health and safety matters.

3. The only basic difference in Walsh-Healey is the limit on the 8 hour day. But if the contractor has entered into union agreements pursuant to law that covers this, even that part of Walsh-Healey would not apply.

4. Where the Government is purchasing off-the-shelf commercial items sold in substantial quantities to the general public:

- a. It would be difficult to determine the impact of a Government contract on the contractor's normal operations.
- b. The period during which the contract would be in force would likely be short, particularly if items were shipped from stock on a single delivery contract.
- c. Enforcement would be difficult or impractical.

Such an exception need not be sought on the eligibility requirements ("manufacturer or regular dealer") of the Act since there would probably be no possibility of an exception. This portion of the law is not duplicated elsewhere and undoubtedly a change in the law itself would be necessary.

With respect to the status of firms as "manufacturers" or "regular dealers" under the Act, according to the Department of Labor, the legislative history of the Act shows that these eligibility requirements were imposed in 1936 to guard against awards to "contract brokers" who would, in turn, subcontract all work to nonunion "sweat shops." With improvements in wages and working conditions over the past 40 years, it is

doubtful that new legislation concerning this eligibility criterion could be justified.

Recommendations:

1. Seek an exception pursuant to Section 6 of the Act that would preclude applicability to commercial products (see DAR 12-606 for procedures).
2. Consult with the Office of Federal Procurement Policy (OFPP) concerning the desirability of seeking repeal of the Act.
3. Initiate action to revise the clause to reflect the essential requirements of Walsh-Healey; or, make reference in the clause to specific sources where prospective offerors may ascertain their obligations, if awarded a contract.

Equal Opportunity

The clause titled as above is contained in both the aircraft and support contracts (General Provision Number 17). It is not required by law. It is required by Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967. Its purpose is to enhance the objectives of the Civil Rights Act of 1964 in assuring non-discrimination on the basis of race, color, religion, sex, or national origin.

Under the Executive Order, the Secretary of Labor may exempt certain classes of contracts such as (i) those under a specified dollar amount, and (ii) contracts for "standard commercial supplies." The Secretary of Labor has exempted prime and subcontracts of \$10,000 or less, unless the

aggregate of awards to any one firm is likely to exceed \$10,000 in any 12 month period. This is reflected in DAR 12-808. However, the sub-contract flow-down limitation of \$10,000 is not reflected in the DAR contract clause. Thus, the clause appears to be defective. Although the Executive Order specifically authorized the Secretary of Labor to exempt "standard commercial supplies," he has not done so. A representative of the Labor Department has indicated there is no record that this exemption has ever been formally considered.

The basic difference between the Civil Rights Act (which applies to industry regardless of Federal contracts) and the Executive Order lie in the affirmative actions required under the Order, as reflected in the clause. These actions include posting of notices, advertising, and furnishing notices to labor unions. Also, the contractor must furnish any information and reports that may be required by the Secretary of Labor.

These actions are not required of commercial product manufacturers who do not sell to the Federal government. Finally, the prime contractor is charged with enforcement responsibilities with respect to subcontractors, in such ways "as the Secretary of Labor may direct."

The burden imposed (except for subcontracting) is largely a one-time matter--the first time the clause impacts. Thereafter, the primary impact of the clause is implementation of the affirmative action program that is not required by the Civil Rights Act. The threat of termination for default is always present. The Government cost and burden of enforcement of contract provisions is significant. A central organization within the Department of Labor, the Office of Federal Contract Compliance

Programs (OFCP), is charged with nationwide enforcement responsibility and a network of DOD Contractor Employment Compliance Offices (CECOs) was established. Recently these functions have been consolidated within the Labor Department. Visits to contractor's plants and compliance reviews have a significant impact on contractor costs. Extensive compliance review, enforcement, and reporting procedures have been established.

Conclusions

1. The present clause does not appear to have exempted subcontracts under \$10,000 from the flow-down provisions, insofar as actions required by the prime contractor are concerned. The guidelines in DAR 12-808 and the requirements of the clause are ambiguous.
2. The clause forces the contractor to refer to rules, regulations, or orders of the Secretary of Labor, with no indication as to where they are published, in order to determine whether any exemptions apply to the flow-down requirements.
3. The Executive Order provides specific authority to the Secretary of Labor to exempt commercial products.
4. DOD does not have the authority to relax or modify the clause except upon a determination by the Secretary of Defense that an award without the clause is essential to the national security.
5. The nature of the requirement is such that the Department of Labor would not likely look with favor on removing requirements that might create the impression of a change of policy concerning support for civil rights programs.

Recommendations:

1. Initiate Defense Acquisition Regulation Council (DARC) action to:
 - a. Clarify the prime contractor's obligation with respect to flow-down of clause requirements in subcontracts of less than \$10,000. The question is, does the lead-in language of the clause, coupled with the requirements of paragraph (7), force the contractor to impose the clause on all subcontractors, including those whose individual subcontracts are less than \$10,000?
 - b. Revise paragraph (7) of the clause either to identify the flow-down exceptions or to state where a listing of the exceptions will be found (e.g. DAR 12-808).
2. Initiate action to request the OFPP to seek a Secretarial Exemption (Labor), pursuant to Section 204 of Executive Orders 11246/11375 that would (a) remove the requirement for inclusion of the clause in contracts for commercial products, or, (b) remove the requirement for flow-down in subcontracts for commercial products.

Utilization of Labor Surplus Area Concerns; and
Labor Surplus Area Subcontracting Program

The two clauses titled as above are contained in both the aircraft and support contracts (General Provisions Numbers 43 and 44). While there is a statutory requirement for giving priority "to the awarding of contracts and the placement of subcontracts" to labor surplus area concerns, the statute does not specify the use of a contract clause. It is necessary to use a clause to give effect to the statute. This requirement was enacted in Public Law 95-39 of August 4, 1977, as an amendment to the Small Business Act (see Section 15(d) attached).

Defense Manpower Policy DMP-4A of October 27, 1977, issued by the Federal Preparedness Agency (formerly the Office of Emergency Planning) implemented Public Law 95-89. The coverage in the Predecessor Order (DMP-4) was not changed with respect to subcontracting policy. The policy continues to be "the encouragement of the award of subcontracts" to labor surplus area concerns. The policy guidelines in DAR 1-805 and the clauses in DAR 7-104.20(a) and (b) were developed on a Government-wide consensus basis by the Armed Services Procurement Regulation Committee and the Federal Procurement Regulation Staff, under the auspices of the Surplus Manpower Committee.

The "utilization" clause calls for best efforts to place subcontracts in labor surplus areas. If this clause were literally complied with, it would be quite burdensome. Full compliance would require a constant updating of identified areas of labor surplus, as determined and published from time to time by the DOL. While no study can be found of the extent of compliance effectiveness in channeling work into labor surplus areas, it is believed unlikely that this clause has any effective impact or value in achieving objectives. This clause is required in all contracts of more than \$10,000 with few exceptions. It contains no subcontract flow-down requirements.

The Subcontracting Program clause imposes significant burden beyond that in the Utilization Clause discussed above. In addition to designating a company official to manage the program, the contractor must maintain special records of procedures adopted to comply. This clause is required in all prime contracts over \$500,000 which offer substantial

subcontracting possibilities. Flow-down of the same clause is required in all subcontracts over \$500,000 that offer substantial subcontracting opportunities.

The "Maybank Amendment" precludes the use of DOD appropriated funds "for the payment of a price differential on contracts hereafter made for the purpose of relieving economic distractions." This provision has appeared in the Armed Forces DOD Appropriation Act for many years. (See Section 824 of Title VIII, P.L. 95-457, of DOD Appropriation Act of 1979.) Accordingly, DOD cannot consent to payment of price differentials in requiring prime contractors to make set-asides or otherwise shift subcontracts to labor surplus area concerns. Since there is no financial motivation to subcontract to labor surplus areas, it is unlikely that the "subcontracting program" clause is any more effective than the "utilization" clause in achieving objectives.

The statutory revision of August 4, 1977 (P.L. 95-89) states that priority shall be given to the awarding of contracts and the placement of subcontracts to concerns "which shall perform a substantial proportion of the production on those contracts within labor surplus areas..." With respect to commercial off-the-shelf products, or common commercial components and parts used in both commercial and modified commercial end items, it is most unlikely that those components and parts will be produced specifically for a Government prime or subcontract.

Conclusions:

1. The "utilization" and the "subcontracting program" clauses are burdensome to both contractors and the Government.

2. Both clauses are considered ineffective in achieving objectives and, therefore, are wasteful.

3. These clauses compete with the small business and minority business clauses as to emphasis and use of resources in implementation of subcontracting programs (i.e., you get more brownie points for awards to small business and minority business enterprises since prime contractor reports of awards are required in these two areas, not on awards to labor surplus area firms, except in the case of set-asides for those firms).

4. Our interpretation that P.L. 95-89 is not applicable to purchases of off-the-shelf commercial products supplied under prime contracts or subcontracts is considered consistent with the language and apparent intent of the law.

Recommendations:

1. Initiate a survey or study within DOD to ascertain whether these clauses are effective in implementing national policy; or in the alternative, consult with knowledgeable industry and Government contract administration personnel to the same end.

2. If the above conclusions are reasonably supportable, present the issue for consideration by the DOD representative on the Surplus Manpower Committee, with a view towards submitting to the OFPP a recommendation for:

- (a) Cancellation of these two clauses;
- (b) Exemption of contracts for commercial products from application of either or both clauses; or, at least
- (c) Elimination of the flow-down requirements of the "subcontracting

program" clause from application in contracts for commercial products.

Clean Air and Water

The clause titled as above is contained in both the aircraft and support contract (General Provision Number 91). Neither of the pertinent statutes (Clean Air Act, 42 USC 1857; Federal Water Pollution Control Act, 33 USC 9251) requires the use of a contract clause. However, they both prohibit contract awards to known violators.

Executive Order 11738 (September 10, 1973) requires the use of a contract clause having the effect of precluding performance of any or all of the work required in a facility designated by the Environmental Protection Agency (EPA) as a violator. However, it is questionable that the Executive Order requires a flow-down of the clause to second tier subcontractors. The clause itself is required in all contracts over \$100,000 and in all subcontracts (any tier) over \$100,000.

The Executive Order also provides that where "...the paramount interest of the United States so requires..." exemptions of contracts or classes of contracts may be made by the head of a Federal agency for certain periods of time. Reports to Congress of such exemptions are required. The essential elements of the published clause are required by regulations issued by EPA.

The essence of the clause is an agreement by the contractor (or subcontractor) that he will (i) comply with Federal laws on clean air and water, (ii) insert the clause in all subcontracts over \$100,000, and (iii) not award subcontracts in any amount if any of the work is

to be done in facilities on EPA's published list of violators. Thus, the clause is used by the Government as an enforcement tool through threat of default, and threat of withholding awards from violators.

Accordingly, the only burden impact by the clause, beyond that already required by law, is to keep abreast of the EPA violators list and make sure no awards are improperly made, and to include the flow-down clause in all subcontracts over \$100,000.

Conclusions:

1. The use of the contract clause as an enforcement tool (threat of default) is not likely to be any more effective than total reliance on enforcement of the law outside the contract. Thus, its value is considered negligible.
2. The contractor's additional burden of compliance due to the clause is considered minor. However, the cumulative burden of complying with this clause and other socio-economic requirements becomes more and more significant as additional requirements are added.
3. There is a degree of burden to the Government in applying the policy and using the clause as prescribed. As in the case of the contractor, the cumulative effect of imposing numerous socio-economic requirements takes on added significance.
4. DOD has no authority to relax or delete the requirement except in any contract for one year where a Secretarial Determination is made that it would be "...the paramount interest of the United States." Any class exception would require prior consultation with EPA.

Recommendation:

That action be initiated to revise the regulation, to eliminate the subcontract flow-down requirements of the clause, regardless of dollar amount, at least insofar as the clause is included in contracts for commercial products. This would require EPA and OFPP approval.

Required Source for Jewel Bearings and Related Items

The clause titled as above is contained in both the KC-10 acquisition and logistics support contracts (General Provision Number 58).

There is no requirement for this contract clause by reason of a statute, Executive Order, or regulation of any civilian agency. The Department of Defense has the unilateral authority to remove or modify the requirements contained in DAR 1-2207.2 and 70104.37 for required sources for jewel bearings and related items. Confirmation of this view was obtained in discussions with officials of the DOD, the Office of Defense Mobilization (ODM), and the Federal Preparedness Agency of General Services Administration (GSA), successor to the Office of Emergency Planning (OEP).

The Government-owned facility at Rolla, North Dakota, the William Langer Plant, is the only source in North America with the capability of manufacturing jewel bearings in large quantities. As part of the U.S. industrial mobilization base, it was established in 1951 to avoid a dangerous dependence on foreign sources of supply in the event of a future war. During the initial years of its existence the plant was directly subsidized by the military departments and the jewel bearings produced were delivered to the Strategic and Critical Materials

Stockpile. It was discovered after several years that there was a high rate of obsolescence in the bearings being stockpiled. Military contractors and subcontractors seemed to be constantly changing the dimensional sizes and configurations of the bearings used by them and, consequently, the bearings being made at the Langer plant had no current military applications.

To correct this situation, ODM requested the DOD to channel military contractors' current purchases of jewel bearings to that plant and to require that those bearings be used in military products. As a result, DAR 1-2207.2 was published which requires contractors to purchase jewel bearings from the Langer plant to meet military requirements although it does not clearly require the contractor to incorporate the bearings in the products delivered to the Government. The purpose of DAR 1-2207.2, however, is to insure that the Langer Plant maintains a capability to manufacture the kinds, sizes and types of jewel bearings needed for military products and that any problems with the quality be promptly disclosed. An additional advantage is the lowered jewel bearing production costs stemming from the larger volume of business at the plant generated by military contractors. Application of the policy was extended to other Government agencies through the Federal Procurement Regulation which, incidentally, clearly requires purchase and use of the Langer Plant jewel bearings.

The required DAR 7-104.37 clause in contracts for the acquisition of commercial products creates a burden on the contractor with respect to off-the-shelf items or items being procured for the Government from a commercial production line. The burden relates to:

1. A certificate of intended use of jewel bearings which must accompany contractor's proposals.

2. Identification of components containing jewel bearings and related items.

3. Subcontract flow-down requirement unless the contracting officer has positive knowledge that components do not contain jewel bearings or related items.

4. Placement of special orders with the Government-directed source for bearings to be used in components for delivery to the Government and orders with the contractor's source of supply for bearings to be used in components for delivery to commercial customers.

5. Negotiating a contract price adjustment if the Government source cannot meet the bearing requirements.

6. Tracking the bearings through the production process with appropriate records to assure that the components to be delivered to the Government contain the Langer plant bearings, if use of those bearings is required.

Conclusion:

In view of the administrative burden of contract compliance and the impracticability of using Langer plant bearings for commercial components, an exemption from DAR 1-2207.2 and 7-104.37 for the acquisition of commercial products would be appropriate.

Recommendations:

1. Initiate action to revise DAR 1-2207.2 and 7-104.37, in concert with GSA (FPR) and OFPP (FAR), to make it inapplicable to the acquisition of commercial products.
2. Initiate action to clarify DAR 1-2207.2 and 7-104.37. concerning required use of Langer plant jewel bearings in components developed for military use.

Required Sources for Miniature and Instrument Ball Bearings

The clause titled as above is contained in both the KC-10 acquisition and logistics support contracts (General Provision Number 59). It is not required by law or Executive Order.

DOD imposed this requirement to assure the continued existence of a domestic industrial base necessary for national defense. The requirement differs from the jewel bearing requirement in that (i) an exception is provided for purchases of standard commercial items other than those which are intended for use as components or subassemblies of defense equipment or systems or, for purchases of the bearing as an end item, and (ii) the requirement to use the bearings in defense equipment or systems may be waived under certain conditions although it is required that a like number and type of bearings be purchased from domestic sources for other uses. The requirement is applicable only to DOD.

For the acquisition of commercially developed systems for defense use whose components incorporate miniature or instrument ball bearings, the required DAR 7-104.38 clause creates an administrative burden on the contractor and subcontractor. The contractor must identify all

components containing designated ball bearings, flow-down the requirement to all subcontractors unless the Contracting Officer has positive knowledge that the component does not contain miniature or instrument ball bearings, and track the bearings with appropriate records through the production process to assure that those components to be delivered to the Government contain the bearings procured from a domestic source, unless use has been waived by the Contracting Officer.

Where the components already include the designated ball bearings procured from domestic sources, there is still the administrative burden of processing the contract clause and flow-down to subcontractors. Where the components include the designated ball bearings procured from foreign sources, the contractor or subcontractor must order like bearings from a domestic source for components to be delivered to the Government and track component production to assure incorporation of those bearings.

Conclusions:

1. Although it is understood that DOD recently completed a study which verified the need to continue the present policy, the validity of this requirement for the purchase of commercial off-the-shelf components or for components being produced on a commercial production line is not evident.
2. The exemption for standard commercial items does not apply to the acquisition of the KC-10
3. Significant administrative burden could be avoided if DAR /-104.38 were not required for the acquisition of commercial products which are not now exempt.

Recommendation:

Ascertain the impact on the domestic industrial base if the requirement of the DAR 7-104.38 was waived for the acquisition of commercial products containing miniature and instrument ball bearings which are not now exempt and if the impact is acceptable, revise the DAR accordingly.

Required Sources for Precision Components for Mechanical Time Devices

The clause titled as above is contained in both the KC-10 acquisition and logistics support contracts (General Provision Number 98). There is no requirement for this clause by reason of a statute, Executive Order, or regulation of any civilian agency. The Department of Defense has the authority to remove or modify the requirements contained in DAR 1-2207.4 and 7-104.46.

This requirement was imposed by DOD to assure the continued existence of a domestic industrial base necessary for national defense. It is essentially the same in scope, intent, and procedural aspects as the requirement for using domestic sources for miniature and instrument ball bearings. Its application is also limited to DOD.

It will be noted that the policy applies only to those precision components included in items under specified Federal Supply (FS) classes. All are identified with non-commercial ammunition programs except aircraft clocks in FS Class 6645. For the acquisition of commercially developed systems that incorporate aircraft clocks, the administrative burden of DAR 7-104.46 is the same as that for DAR 7-104.38, Miniature and Instrument Ball Bearings, i.e., in processing the contract clause and flow-down to subcontractors.

Conclusions:

1. Although the recent DOD study also verified the need to continue requiring this clause, the validity of the requirement for the purchase of commercial products is not evident.
2. The exemption for standard commercial items does not apply to the acquisition of the KC-10.
3. Significant administrative burden could be avoided if DAR 7-104.46 were not required for the acquisition of commercial products which are not now exempt.

Recommendation:

Ascertain the impact on the domestic industrial base if the requirement of DAR 7-104.46 were waived for the acquisition of commercial products containing aircraft clocks which are not now exempt, and if the impact is acceptable revise the DAR accordingly.

Preference for Domestic Specialty Metals (Major Programs)

The clause titled as above is contained in both the aircraft and support contracts (General Provision Number 84). This requirement is imposed by provisions of annual DOD Appropriations Acts which prohibit the use of appropriated funds to acquire foreign specialty metals or products containing them. While the Act does not specify the use of a clause, this is clearly necessary to implement the law.

This requirement was imposed by the Congress in order to protect domestic specialty metals producers from foreign competition. Prime contracts under \$10,000 are exempt under the statute. This is reflected

in DAR 6-303. The statute also provides exceptions to this requirement (for specialty metals and other items, including food, wool, clothing, etc.) where the items (i) are purchased outside the United States to support combat operations, or (ii) are emergency purchases, as well as other exceptions clearly not applicable to this contract. For specialty metals alone, an exception is provided where necessary to meet international agreements and to further standardization and interoperability requirements within NATO.

Notwithstanding the \$10,000 exemption in 6-303, the body of the clause in DAR 7-104.93 requires flow-down of the clause in all purchase orders and subcontracts regardless of dollar amount. It would appear that this flow-down requirement should be limited to purchase orders and subcontracts over \$10,000, as in the case of prime contract awards.

An adverse impact on cost is indicated in that the contractor must:

- (i) identify every part or component that consists of or contains specialty metals;
- (ii) establish whether those parts or components are available from U.S. "melt" sources;
- (iii) insert a flow-down clause requiring U.S. "melt" specialty metals in every purchase order or subcontract (including small purchases) involving specialty metal products.

Where domestic "melt" sources are not available, a Secretarial determination is required to that effect before foreign source metals can be acquired unless there is an international agreement to further standardization and interchangeability.

The quantity and cost of specialty metals required to perform the KC-10 contract or of those contained in comparable commercial items are unknown. In one instance, the KC-10 engine subcontractor, General Electric Co., is purchasing specialty metals outside of the United States. The General Electric Co., with DOD concurrence, considers procurement of specialty metals from countries with which DOD has a Memorandum of Understanding that expresses an intention to increase procurement of standard or interoperable equipment, as being exempt from the clause and the annual DOD Appropriations Act.

DOD estimates its requirements for specialty metals (direct purchase and incorporated in end items) at less than 4% of the total U.S. market.

DOD has made many efforts and legislative proposals to cause the Congress to eliminate or modify this statutory requirement, particularly as to flow-down, without success.

Conclusions:

1. The cost and burden of implementation is considered significant and out of proportion to benefits derived.
2. The contract clause, as presently worded, provides no exemption for subcontracts under \$10,000, which appears contrary to intent.
3. These requirements are not imposed on Federal agencies other than DOD.
4. DOD does not have the authority to relax present requirements, including flow-down.

Recommendations:

1. That estimates be developed on the portion of the DOD requirements for specialty metals that are found in commercial products that DOD acquires (end items and components) (i.e., percentages for commercial products within DOD's 4% requirements share of the total U.S. market.)
2. On the basis of information developed under 1. above and of implementation impact data, initiate action leading to a relaxation with the appropriate Congressional Committees, or failing in that, to a legislative proposal for revising future DOD Appropriation Acts, so as to exempt commercial products and/or commercial components from these requirements.
3. Or, initiate action through OFPP to amend the clause so that flow-down provisions are not applicable to subcontracts under \$10,000.

Buy American Act

The clause is contained in both the aircraft and support contracts (General Provision Number 27). The clause is considered necessary to implement the provisions of the Buy American Act of 1933. Since the KC-10 is clearly a domestic end product as defined in the clause, the Buy American Act clause in the aircraft contract is, in effect, self-deleting. The Act requires that the Government give preference to domestic source end products to meet its needs. There are several exemptions. The burden of compliance is largely borne by the Government in the acquisition process. The burden on contractors is relatively insignificant since they would generally know whether their products are domestic end products.

One potential difficulty arises in the KC-10 program, and may be continuously arising in the acquisition of commercial products, with regard to the use of foreign components or parts in the support of a "domestic source end product." Where replacement or repair parts are needed, an issue arises as to whether they can or should be acquired from the original manufacturing source. An "automatic" exception to the Buy American Act is provided in DAR 7-102.2(c)(i) that may have been relied upon in excepting certain products from the Act. The provisions of DAR 1-313 Procurement of Parts must be met to meet the criteria.

While no impact on the logistics support of the KC-10 is presently foreseen, the language in DAR 1-313 might well be construed to preclude the sole source acquisition of foreign parts which are commercial or which have commercial equivalents readily available in the U.S. marketplace. If so interpreted, this could have a significant adverse cost impact in situations where the contractor is providing logistics support through a distribution system that is meeting the combined needs of both Government and commercial customers.

DOD has no authority to unilaterally exempt replacement and repair parts for commercial products from the Act except for nonavailability of U.S. sources.

Recommendation:

Request a review by O&P of the present DAR exceptions (6-103.2(c)(i) and 1-313) in respect to the objectives of the Buy American Act with a view to expanding the exceptions to include all foreign parts incorporated in domestic source end items that are commercial products

and when a contractor provides commercial support to both Government and commercial customers.

Duty-Free Entry - Canadian Supplies

The clause titled as above is contained in both the aircraft and support contracts (General Provision Number 52). This clause implements policies established to enhance economic cooperation with Canada in the interest of continental defense and U.S./Canada production sharing agreements. The policies, procedures and prescribed clauses further U.S./Canadian agreements that preclude unilateral DOD elimination, or major revision, without modifying those agreements. The policy provides for:

1. Treating offers from Canadian firms in the contracting process the same as offers from U.S. firms, as regards evaluation of bids or proposals with applicable duty excluded for "listed" items and included for "unlisted" items.

2. Waiving application of the Buy American Act to purchases from Canadian firms (Blanket Secretarial determination under the "public interest" authority of the Act).

Application of this clause to a contract requires an effort to be made to identify those supplies that are to be imported from Canada, and where there are such supplies, to assure that no duty is included in prices quoted; to obtain duty-free entry certificates; and to include flow-down provisions in subcontracts over \$2,500.

There are also certain Government costs associated with the prescribed policy and procedure. These costs relate to training, insertion

of the clause, enforcement of the clause, and issuance of duty-free entry certificates. However, there is a fall-out benefit to the Air Force in the form of savings of Air Force appropriations that would otherwise be spent to cover the costs of import duty contained in contract prices.

The clause is used in all DOD contracts for end items included in Departmental "lists" (see DAR 6-605 and 6-103.5(a)). It is also used in contracts for unlisted end items where listed items will be incorporated as components of unlisted items.

An exception to inclusion of the clause in the prime contract is provided where it is "reasonably certain that no supplies will be imported from Canada in excess of \$2,500 by the contractor or any first or lower tier subcontractor." However, the clause language contains a mandatory subcontract flow-down provision covering "all subcontracts for supplies hereunder that exceed \$2,500."

Another exception is provided in the clause with respect to identical supplies used by the contractor in connection with his commercial business where it is not economical or feasible to identify the duty-free imports with specific Government requirements.

Recommendation:

Initiate action to cause the revision of the first sentence in paragraph (h) of clause DAR 7-104.32 by adding the material shown in brackets:

"(h) The Contractor agrees to insert the substance of this clause, including the paragraph (h), in all subcontracts for supplies hereunder that exceed \$2,500 [except where the contractor

or subcontractor is reasonably certain that no supplies will be imported from Canada by the particular subcontractor for use in connection with the contract performance.] "

Preference for United States Flag Air Carriers

The use of U.S. flag air carriers by contractors and subcontractors is required by Public Law 93-623 where air transportation of personnel or property outside the U.S. is contemplated in Federal contract performance. The clause is not contained in the aircraft contract.

Although DOD did not object to this legislation prior to its enactment, neither did it sponsor or promote its passage. It was promoted by private airline organizations as a means of reducing competition from foreign carriers. The burden impact of this clause is minimal in terms of compliance. Once procedures are established to assure use of U.S. carriers, the only remaining administrative burden is the execution of nonavailability certificates where it is necessary to use foreign carriers. The flow-down feature is mandatory where air transportation of passengers or property may be performed by subcontractors outside the U.S. DOD has no authority to grant deviation either on a one-time or blanket basis. This clause causes complications if foreign subcontractors are required to comply with the law of their country requiring them to use carriers of their own country when shipping subcontracted items to the U.S.

Any adverse impact would not likely be sufficient to justify a DOD proposal to repeal the law, particularly in view of "balance of payments" advantage. Recent legislation to de-regulate the airlines, however, may indicate that the present climate would favor repeal. Another factor

favoring repeal is the fact that foreign airlines are significant buyers of the DC-10 and other U.S. commercial aircraft.

Recommendation:

Discuss with OFPP, and proceed on basis of the extent of their support to seek repeal; or, at least seek relaxation of the clause for purchase of commercial products.

Affirmative Action for Handicapped Workers

The clause is contained in both the aircraft and support contracts (General Provision paragraph 5 of the aircraft contract, and paragraph 7 of the support contract).

The Rehabilitation Act of 1973 requires that every Federal contract and subcontract of more than \$2,500 shall contain a provision requiring affirmative action in the employment of qualified handicapped individuals. The requirement involves flow-down in all subcontracts over \$2,500; filing quarterly reports; listing of openings; maintenance of special records; posting of notices; and notices to labor unions. The effectiveness of the clause in achieving objectives is not readily measureable, nor are the costs of compliance. There do not appear to be any direct benefits to the Air Force. By Executive Order, the clause is under the authority of the Secretary of Labor. DOD has no authority to relax the clause requirements except in a case-by-case basis in the national interest.

Compliance with the clause is burdensome and it cannot likely be demonstrated that the clause has not been worthwhile in achieving

objectives. However, any effort to modify requirements to reduce the impact on costs of commercial products would not likely be successful.

Recommendation:

Initiate action to remove the requirement to include the clause in contracts for commercial off-the-shelf products. Alternatively, seek to remove the flow-down requirements in subcontracts, or, at least significantly increase the dollar exemption.

Affirmative Action for Disabled Veterans
and Veterans of the Vietnam Era

The clause is contained in both the aircraft and support contracts (General Provision, paragraph 9 of the aircraft contract and paragraph 6 of support contract). All contracts and subcontracts for personal property in excess of \$10,000 are required by law to contain a clause covering affirmative actions to employ and advance qualified disabled veterans and veterans of the Vietnam Era.

While the statute does not contain all of the requirements included in the clause, it specifically requires "affirmative action" to employ veterans and a reporting of openings to the local employment service office. The clause itself, as it appears in DAR 7-103.27, is identical to the mandatory clause published by the Secretary of Labor pursuant to authority delegated by the President under Executive Order. Thus no changes may be made without approval of the Secretary of Labor. However, the Secretary of Defense with the concurrence of the Department of Labor may waive use of the clause in any contract, subcontract, or groups of those contracts, where it is in the national interest, as outlined in DAR 12-1402(d).

This is one of the more burdensome socio-economic clauses in view of the affirmative actions required, including:

- a. Flowing down the requirements in all subcontracts over \$10,000.
- b. Filing quarterly reports.
- c. Listing of openings.
- d. Maintenance of special records.
- e. Posting of notices.
- f. Notices to labor unions.

The value of this clause in achieving objectives cannot readily be measured. Undoubtedly it has had good effects in terms of hirings and promotions. But whether the benefits exceed the cost is conjectural. In any event, the Congress has determined that a need exists, and that the Government has a special obligation, to maximize assistance to disabled and Vietnam Era veterans. There are also probable indirect benefits to AF and DOD missions in enlistment programs because of Government interest in providing employment assistance to veterans. For these reasons and the political aspects, the approval of any waivers or clause modifications is unlikely unless it can be shown clearly that the rights conferred would not be diminished.

DOD has no authority to eliminate or relax the requirements of the clause without the concurrence of the Department of Labor.

Recommendation:

Consider seeking a blanket exception concerning commercial off-the-shelf products, or eliminating the flow-down requirements in such contracts.

Utilization of Small Business Concerns; and
Small Business Subcontracting Program

These two clauses are contained in both the aircraft and support contracts (General Provisions Numbers 37 and 38.) At the time these contracts were executed, the Small Business Act did not contain an explicit requirement for contract clauses, but proper implementation necessitated their inclusion.

The Utilization clause is necessary in all contracts over \$10,000, without flow-down requirements. The Subcontracting Program clause is required generally in all prime contracts over \$500,000 where subcontract opportunities exist. Flow-down of the clause is required in all subcontracts over \$500,000 where subcontracting opportunities exist.

The Small Business Committees of the Senate and House have held periodic hearings over a period of many years in which issues on the use, administration and compliance with the published clauses were examined. By Public Law 95-507 (October 24, 1978), amending the Small Business Act, many new requirements have been imposed on the contracting process. Specific clauses and pre-award negotiations are now prescribed by the law. Prior to P.L. 95-507, prime contractors were required, among other things, to:

- (i) Establish and conduct small business subcontracting programs;
- (ii) designate a company liaison officer to interface with the Government and supervise compliance;
- (iii) consider small business in make-or-buy decisions;
- (iv) assure opportunities for small firms;

- (v) maintain records of small business solicitations and awards;
- (vi) submit quarterly reports on accomplishments; and
- (vii) flow-down the subcontracting program clause in subcontracts over \$500,000.

Under the new law, the additional mandatory requirements for contracts over \$500,000 include:

- (i) Submission of a subcontracting plan, prior to award, acceptable to the Government; and
- (ii) establishment of goals for the award of subcontracts to small business concerns generally and to minority-owned small businesses.

The OFPP, in coordination with DOD and the civilian agencies, will be endeavoring to implement the new law with due regard for new policies covering the acquisition and distribution of commercial products. DOD does not have the authority to relax or ignore the new statutory requirements.

Utilization of Minority Business Enterprise; and
Minority Business Enterprises Subcontracting Program

These two clauses are contained in both the aircraft and support contracts (General Provisions Numbers 56 and 57).

At the time of execution of the two contracts, there was no statute or Executive Order that either explicitly or implicitly required either of the two cited General Provisions.

The policies (and clauses) were developed by the DAR Committee and FPR Staff in conjunction with the Government Interagency Committee established by the Secretary of Commerce pursuant to the Executive Orders. While the requirements of these clauses, which are quite similar in scope and burden to the Small Business clauses, might "legally" be changed unilaterally by DOD, to do so would breach the understanding reached with the Commerce Department (Under Secretary) and other agency members of the Interagency Committee. This background becomes relatively immaterial, however, in light of Public Law 95-507 (enacted October 24, 1978). This new law imposes the same burdensome requirements as are prescribed for small business firms that are not minority owned. For more details, see the preceding discussion of the small business clauses.

The OFPP, in coordination with DOD and the civilian agencies, will be endeavoring to implement the new law with due regard for new policies covering the acquisition and distribution of commercial products. DOD does not have the authority to relax or ignore these new statutory requirements.

Safety and Accident Prevention

This clause is in the support contract (General Provision paragraph 4).

The requirement for the clause, and the clause itself, are established by the Department of the Air Force for all contracts, except construction, which are to be performed on a Government installation. The clause requires the contractor to conform to specific safety requirements in the contract; and for related activities, to conform to applicable safety rules prescribed in AFR 127-101, and the Air Force Occupational

Safety and Health (AFOSH) Standards developed in accordance with AFR 127-12 and AFR 8-14 for Air Force bases; or as prescribed by the Government installation if other than an Air Force base; take additional immediate precautions as the contracting officer may reasonably require, and take all reasonable steps and precautions to prevent accidents and preserve the life and health of contractor and Government personnel performing or in any way coming in contact with the performance of this contract. The clause further requires prompt correction of any violation as directed by the contracting officer under threat of default termination.

The burden to an offeror not experienced in bidding to the Government would be the initial task of acquiring all referenced Air Force Regulations and the AFOSH Standards for each base or installation. This could be a difficult task for the offeror unless the RFP clearly states that certain reference documents can be obtained upon request to the contracting officer. Upon receipt of these documents he must review his own operations to see if changes will be needed to meet requirements of the clause; and estimate the scope of the phrase, "...take all reasonable steps and precautions to prevent accidents and preserve the life and health of contractor and Government personnel performing or in any way coming in contact with the performance of this contract...."

Except for the potential difficulty of an inexperienced offeror acquiring referenced documents, the clause does not appear to impose a significant burden nor is it unreasonably imposed.

Recommendation:

That the Air Force add a sentence substantially as follows to the clause contained in AF DAR Sup. 7-5000.10: "A copy of referenced Air Force Regulations and AFOSH Standards will be furnished upon request to the contracting officer."

Renegotiation

The Renegotiation Act expired when funding of operations beyond March 31, 1979, was not authorized by the Congress. A Defense Acquisition Circular to discontinue use of the clause is expected in the near future.

Price Reduction for Defective Cost or Pricing Data;
Subcontractor Cost or Pricing Data;
Cost Accounting Standards; and
Administration of Cost Accounting Standards

The clauses are in both the aircraft and support contracts (General Provisions Numbers 50, 63, 83, and 89 respectively).

The two clauses concerning pricing stem from P.L. 87-653, the "Truth in Negotiations Act" of 1962. The two accounting clauses are required by statute (P.L. 91-379). The Act, and the implementing clause, require a prime contractor and any subcontractor to submit cost or pricing data for negotiated purchases over \$100,000, with certain exceptions, and certify to the best of his knowledge and belief, the cost or pricing data submitted was accurate, complete, and current. The requirements of the law appear to be reasonable and the burden to contractors consists of the additional effort, if any, required to assure that data submitted is current, accurate and complete.

The accounting clauses require contractor and subcontractor (unless exempt) disclosure of cost accounting practices and compliance with all cost accounting standards. There is also the burden of applying the authorized exemptions and the flow-down procedures. The KC-10 purchases were exempt from these clauses, except for the KC-10 peculiar portion of the procurement. The KC-10, commercial portion, was exempt by contractor submission and Air Force acceptance of DD Form 633-7: Claim for Exemption from Submission of Certified Cost or Pricing Data.

The KC-10 "peculiar" portion of the aircraft is primarily a modification to the basic DC-10 to add a refueling capability. The exemption from the submission of certified cost or pricing data did not apply to the modification, since the modification is not a "commercial item." Thus the situation arises wherein a modified commercial item, of which the estimated cost of the "commercial" portion is about 90 percent of the selling price of the total modified commercial aircraft, causes a contractor to break-out all "peculiar" costs including subcontracts, and purchase them in accordance with Government requirements rather than commercial standards. This means his accounting practices and records, for the "peculiar" only, are subject to audit; costs must be submitted to the Government and certified; and in purchasing, the flow-down of all clauses (except for exempt purchases from subcontractors) is required.

For both buyer and supplier, this adds an additional burden to (i) identify the "peculiar" buys; (ii) modify commercial purchase forms to add a separate additional group of Government clauses; (iii) take any additional actions required by these clauses; and (iv) the subcontractor

must then repeat some of these steps. This is particularly burdensome for a subcontractor having no prior experience selling to the Government. He must take action required by these Government clauses.

While the various resulting problems are ultimately resolved in a variety of ways, there is an impact of additional administrative effort and higher cost. The administrative effort and higher cost are not easily measured, or even accurately estimated. It is a relatively small amount compared to the overall cost of the contractor's managerial, accounting, and purchasing operations; and a relatively small amount for the subcontractors. Thus these costs get absorbed into the overhead costs of all DC-10's; and, in effect, commercial customers subsidize Government purchases.

These four clauses would be predicted to have a significant impact on a commercial customer without any prior experience doing business with the Federal Government. To the extent a prospective supplier would anticipate major cost increases in his accounting and sales departments, these clauses would inhibit potential suppliers from bidding on Government requirements.

Recommendations:

1. That the definition of a "commercial product" for pricing purposes include modifications that are relatively minor, and do not involve significant cost risk to either buyer or seller.
1. That the Government encourage offeror submission of DD Form 633-7: Claim for Exemption from Submission of Certified Cost or Pricing Data, wherever potential application appears reasonable.

Duty-Free Entry for Certain Specified Items

The clause titled as above is contained in the aircraft contract (General Provision Number 102).

The statute authorizing duty-free entry of supplies for "vessels or aircraft" operated by the United States; and the Tariff Schedules of the United States, which provide a broad scope of allowable imports without duty for national defense purposes, are permissive in nature. The decision on whether to take advantage of duty-free authority is entirely up to DOD.

Generally, the duty-free entry clause and procedures are to be used in connection with all negotiated contracts over \$100,000, where it is anticipated that parts or components of end items to be delivered will be imported. It is also to be used in contracts of lesser amount where the aggregate duty under a contract will exceed \$1,000.

The primary purpose of the policy is to conserve military appropriations that would otherwise be lost, to the extent that the cost of import duty is included in contract price or otherwise reimbursed to defense contractors. The availability of duty-free entry procedures is considered in connection with international agreements (e.g. production sharing on U.S. and foreign weapons systems programs) for economic or political reasons, and not just for purposes of conserving military appropriations.

There is considerable administrative and paperwork burden for contractors and the Government in following prescribed procedures (DAR 6-603.2, 6-603.3, and 6-603.4). The flow-down provisions in subcontracts

apply to the extent that imports are identified in advance in the prime contract and therefore present no unusual problem other than a compliance burden. Other procedures apply in varying circumstances.

There are two issues involved in considering the efficiency of the procedure. The first concerns the question of whether the advantage in the form of savings to military appropriations outweighs the administrative and other costs in following the duty-free entry procedure. A reading of the policy statement (DAR 6-602) can easily lead to the conclusion that a savings of \$1,000 in appropriations would warrant cost incurrence in the amount of significant sums (e.g. \$500) in following the procedure. The second issue concerns the value of the procedure from the standpoint of the Government as a whole. To oversimplify an example, a Government procedure could hardly be considered as sound where \$500 should be spent in order to funnel \$1,000 in funds (equated to duty) into one pocket of the Government (Air Force) instead of another (Treasury). Since the duty-free item applies only to the KC-10, and not to the several hundred DC-10's, there is a seeming paradox in accepting the contractor's price for a commercial product, and then presumably reducing that price for a net savings in duty (to Air Force appropriations).

The procedures are relied upon for purposes other than conservation of appropriations, in connection with production sharing and other international agreements with friendly nations. However, except where such commitments exist, DOD has the authority to revise these requirements unilaterally.

The KC-10 contract, Section J, Special Provision Number 37 lists items for duty-free entry. The logistics support contract in Section L, General Provisions, paragraph 2(h) lists the same items plus airspeed indicators as exceptions to the Buy American requirements, but does not provide for duty-free entry.

Recommendations:

1. That DOD compare the total costs of applying duty-free entry procedures (contractor, subcontractors, and Government) with appropriations savings to military caused by duty-free entry and adjust criteria for use accordingly; but without changing selective application of duty-free entry to meet international commitments.
2. That the airspeed indicator be added to the list of duty-free items in the KC-10 contract, if it is being procured from a foreign source.

Equal Opportunity Pre-Award Clearance of Subcontracts

The clause is in both the aircraft and support contracts (General Provision Number 46).

The clause is required by 40 CFR 60-129 published by the Secretary of Labor under authority of Executive Order 11246, as amended.

DOD has no authority to relax or remove this clause. It requires that all proposed subcontracts of \$1 million or more be cleared with the contracting officer who must be assured that the proposed subcontractor is in compliance with equal opportunity requirements.

The providing of information to the contracting officer concerning proposed awards does not, in itself, create any significant burden.

There would be relatively few proposed subcontract awards of more than \$1 million. However, problems could be created as a result of any delays in conducting a compliance survey. While the procedures are clear in DAR, with respect to potential delays in prime contract awards, no guidance or authority is permitted for the clearance of subcontract awards.

Recommendations:

1. Prepare for submission to the OFPP and Labor Department a revision to the pre-award approval procedures for subcontracts over \$1 million that would, in effect, be similar to that provided for clearance under the Clean Air and Water procedures. This would merely involve a check to determine whether the proposed subcontractor has been found to be in non-compliance and not eligible for award. If not so found, award could be made. Any required compliance survey could be made thereafter and appropriate actions taken, if violations are found.
2. DOD, with OFPP and Department of Labor concurrence, exempt purchase of commercial products from this E. O.

Safety Precautions for Ammunition and Explosives

The clause is in both the aircraft and support contracts (General Provision Number 80).

The clause is required by DOD's Safety Manual for Ammunition, Explosives and Related Dangerous Materials (DOD Manual 4145.26M). The clause requires contractor compliance with the manual, reports of accidents, subcontractor flow-down involving ammunition and explosives.

and a statement on contractor's responsibility. The contractor was relieved of flow-down of the clause except for KC-10 peculiar requirements.

Since the contract, including the Statement of Work, contains no reference to any ammunition and explosives, the need for the clause is not evident.

Recommendation:

That the need for the clause in those contracts be reviewed by the Air Force, and that the clause be deleted if found not applicable.

Accident Reporting and Investigation Involving
Aircraft, Missiles, and Space Launch Vehicles

The clause is in both the aircraft and support contracts (General Provision Number 81).

The DAR clause is permissive within DOD. The clause requires prompt reporting of accidents to the ACO, cooperation and assistance if the Government investigates, and flow-down in applicable subcontracts. The flow-down was waived except for KC-10 peculiar requirements. In view of FAA investigation responsibility for the DC-10, and the KC-10 is being purchased primarily to FAA requirements, the need for the clause is not apparent.

Recommendation:

That the Air Force review the necessity for this clause; and if it is not necessary, propose additional guidance in the DAR for purchases of commercial products and modified commercial products.

Preservation, Packaging, Packing and Marking

This clause is specified as a socio-economic, environmental, or national policy clause in the study contract. This clause appears in Section G of each contract. It reads as follows: "Preservation, packaging, packing and marking of the supplies called for thereunder, the price of which is included in the price of said supplies, shall be in accordance with Contractor's Standard Commercial Practice."

The only other clause under the heading is "Military Standard Transportation and Movement Procedures (MILSTAMP)" in both contracts. MILSTAMP procedures are to be used only when shipments by the contractor are moved by the Defense Transportation System. The clause would have potential application by providing necessary information for processing a shipment through the Defense Transportation System.

Exhibit 1

<u>Abbreviated Title of Clause</u>	<u>Clause Required by</u>	<u>DAR Reference</u>
Potential application Service Contract Act ^{1/}	DPC 76-1	None ^{2/}
Walsh-Healey	41USC35.45	7-103.17
Equal Opportunity	E.O. 11246, 11375	7-103.18(a)
Equal Opportunity Clearance	E.O. 11246, 11375	7-104.22
Labor Surplus Sub	P.L. 95-89	7-104.20(b)
Utilization of Labor Surplus	P.L. 95-89	7-104.20(a)
Clean Air and Water	E.O. 11738	7-103.29
Jewel Bearings	DAR 1-2207.2	7-104.37
Miniature Bearings	DAR 1-2207.4	7-104.38
Precision Components	DAR 1-2207.4	7-104.46
Domestic Metals	P.L. 95-457	7-104.93
Buy American	41 USC 10	7-104.3
Duty Free Canadian	Departmental Secretaries	7-104.32
Duty-Free Items ^{3/}	19 USC 1309	7-104.31(a)
Preference - U.S. Carriers ^{1/}	P.L. 93-623	7-104.95
Handicapped Workers	P.L. 93-112	7-102.28
Disabled Veterans	38 USC 2012	7-103.27
Utilization of Small Businesses	P.L. 95-507	7-104.14(a)
Small Business Subcontracting	P.L. 95-507	7-104.14(b)

<u>Abbreviated Title of Clause</u>	<u>Clause Required by</u>	<u>DAR Reference</u>
Utilization of Minority Business	P.L. 95-507	7-104.36(a)
Minority Business	P.L. 95-507	7-104.36(b)
Safety and Accident Prevention	AF/DAR 7-5000.10	AF/DAR 7-5000.10
Renegotiation		7-103.13(a)
Price Reduction - Defective Data	P.L. 87-653	7-104.29
Subcontractor Pricing	P.L. 87-653	7-104.42(a)
Cost Accounting Standards	P.L. 91-379	7-104.33(a)
Administration of Cost Standards	P.L. 91-379	7-104.83(b)
Safety - Ammunition	DOD 4145.26M	7-104.79(a)
Accident Reporting	DAR 7-104.81	7-104.81
Packaging	None	1-1204

1/ Not in Aircraft Contract.

2/ Service Contract Act clause is DAR 7-1903.41(a); currently not in Contract.

3/ Not in Logistics Support Contract.

NOTES: All clauses appear in both the aircraft and the support contracts, unless footnoted to indicate appearance in only one contract.

Exhibit 1
(Continued)

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